

Периферийные устройства для промышленных мониторов

Технические характеристики

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RFID Reader for Zone 2/22

RFID20-*



- Flexible RFID (125 kHz and 13.56 MHz) reader with NFC capabilities
- Flush mountable for easy integration in VisuNet Systems
- Compatible with LogOnPlus software
- Provides access to all standard USB operating modes as HID, USB-CCID und USB CDC

RFID Reader/Writer for LF, HF, NFC

Function

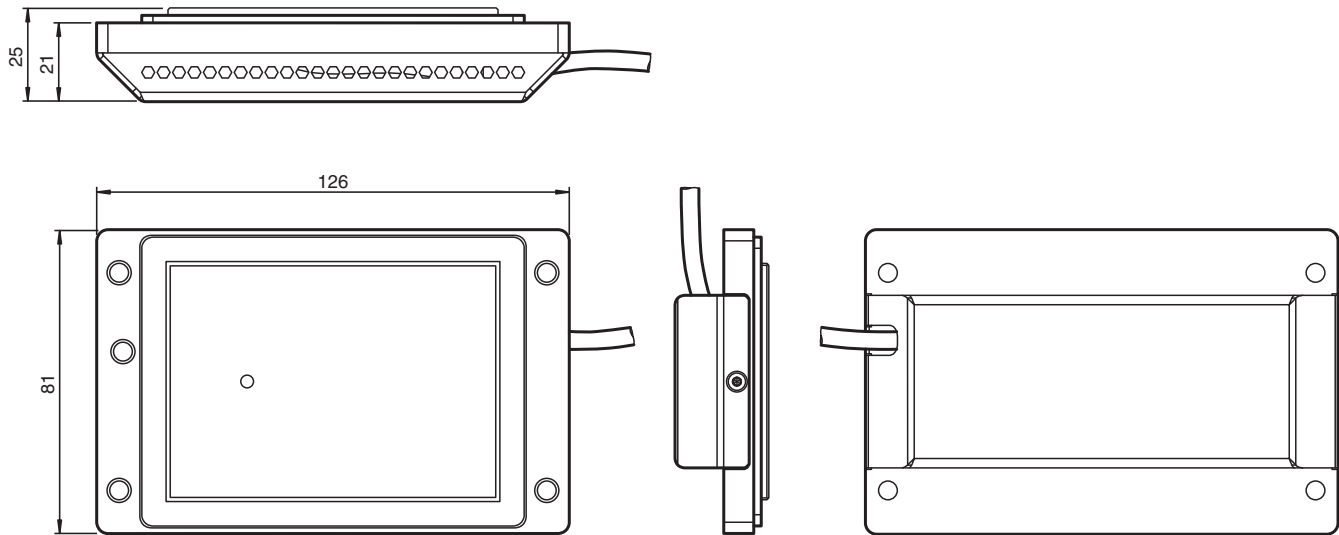
The RFID20-* integrates RFID and NFC capabilities into a compact and flexible reader and allows users to read and write almost all common worldwide 125 kHz and 13.56-MHz tags and/or labels. The RFID20-* is designed as an additional configurable accessory for the Pepperl+Fuchs Workstations but can be used as stand-alone RFID Reader/Writer as well.

Function Principle

Example: RFID20-* integrated in the VisuNet FLX System



Dimensions



Technical Data

General specifications		
Type		RFID Reader/Writer for LF, HF, NFC
Operating distance		LF and HF: Up to 76 mm / 3 inch, depending on environment and transponder
Supply		
Power supply		4.3 V - 5.5 V via USB; via generic interface (X2) 3.3 V ± 5%Limited power source according to the safety norms listed in the respective declaration of conformity, short-circuit current < 8 A
Indicators/operating means		
Indicators		LED green: power on LED red flashing beeper/buzzer: read/write attempt performed
Electrical specifications		
Operation frequency		125 kHz (LF) / 13.56 MHz (HF)
Interface		
Interface type		USB
Directive conformity		
Explosion protection		
Directive 2014/34/EU		EN IEC 60079-0:2018 EN IEC 60079-7:2015+A1:2018 EN IEC 60079-31:2024
Radio and telecommunication terminal equipment		
Directive 2014/53/EU		RFID20-A-*NF-****-N**: EN 300 330 V2.1.1 EN 301 489-1 V1.9.2 EN 62368-1:2014+AC:2015-05+AC:2015-11 EN 50364:2010 EN 62479:2010 EN 55032:2015 Additional standards: EN 301 489-1 V2.1 .1 EN 301 489-3 V2.1 .1 EN 62311:2008EN 62369-1:2009 RFID20-B-*NF-****-N**: EN 300 330 V2.1.1 EN 301 489-1 V1.9.2 EN 62368-1:2014+AC:2015-05+AC:2015-11 EN 50364:2010 EN 62479:2010 EN 55032:2015 Additional standards: EN 301 489-1 V2.2.3 EN 301 489-3 V2.1 .1 EN 62369-1:2009 EN 62311:2008

Technical Data

RoHS		
Directive 2011/65/EU (RoHS)	EN IEC 63000:2018	
Conformity		
Degree of protection	Front side: Non-Ex: IP66 with included front foil, With Ex-certification: IP66 with included front foil Back side: IP20	
Ambient conditions		
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)	
Storage temperature		-20 ... 65 °C (-4 ... 149 °F)
Relative humidity	max. relative humidity 93% at 40°C (non-condensing) according to EN60068-2-78	
Mechanical specifications		
Material	PEEK housing, anodized aluminum backside	
Mass		300 g
Dimensions	126 mm x 81 mm x 25 mm	
Cut out dimensions		82 mm x 57 mm
Cable length	1.8 m / 0.6 m	

Type Code

RFID20-*

RFID20-	(1)-	(2)	(3)-	(4)	(5)-	(6)
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Model	
RFID20-	RFID reader Zone 2/22

(1)-	Reader
A-	ElatecReader TWN4 MultiTech 3 M LF HF
B-	ElatecReader TWN4 MultiTech 3 LEGIC M LF HF

(2)	Explosion protection
N	Non-Ex
R	ATEX Zone 2/22 (Self-Declaration)

(3)-	Mounting options
NF-	Flush mount

(4)	Interface
UA	USB with Type A connector

(5)-	Cable length
06-	Standard 0.6-m cable for installation in VisuNet FLX System Housing
18-	1.8-m cable for standalone application

(6)	Options
N0	None
XX	Other options without impact on explosion protection

Example:

RFID20-	A-	N	NF-	UA	06-	N0
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DC Power Supply PSU1100-J1-DC-N0

- Certified for ATEX and IECEx Zone 1/21
- Galvanic isolation between input and output
- Provides an output power up to 80 W at 24 V DC
- Fully IP66 rated

DC Power Supply



Function

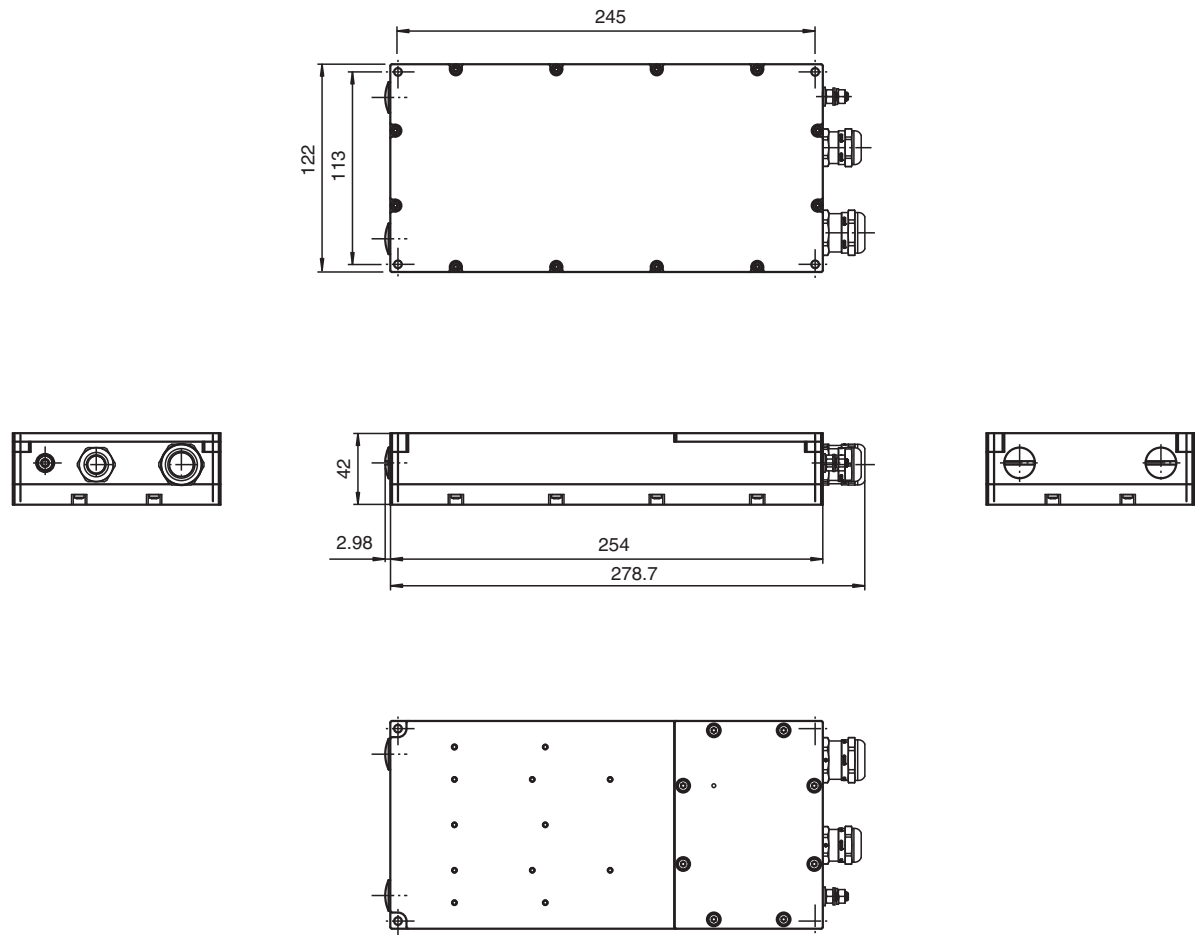
The device is an apparatus certified for use in hazardous areas rated according to ATEX directive and IECEx Zones 1 and 21. The device is a DC-DC power supply and supplies explosionprotected equipment in the hazardous area. The device provides an output voltage of 24 V DC based on 18 V to 36 V DC input voltage.

The output power has a derating from 50 °C to 65 °C (80 W to 50 W).

The device is optimized for use with the following devices:

- Display Unit DPU1100-J1-*
- Thin Client Unit TCU1100-J1-*
- PC Unit PCU 1100-J1-*

Dimensions



Technical Data

Supply		
Input voltage		18 ... 36 V DC (SELV/PELV acc. IEC 60950-1)
Input current		max. 5.5 A/2.7 A
Output		
Output current		max. 3.3 A
Voltage		24 V DC (SELV)
Power		80 W with derating
Power dissipation		17 W at 80 W output power
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013 (industrial locations) ; EN 61000-6-4:2007+A1:2011
RoHS		
Directive 2011/65/EU (RoHS)		EN 50581:2012-09
Ambient conditions		
Operating temperature		-20 ... 65 °C (-4 ... 149 °F) with derating
Storage temperature		-20 ... 65 °C (-4 ... 149 °F)
Relative humidity		93% at 40°C, non-condensating, according to EN60068-2-78
Shock resistance		18 shocks 15 g , 11 ms all axis, IEC 60068-2-27
Mechanical specifications		
Core cross section		max. 2.5 mm² (14 AWG)
Degree of protection		IP66
Material		

Technical Data

Housing	anodized aluminum
Mass	approx. 2.5 kg
Dimensions	245 mm x 122 mm x 42 mm
Data for application in connection with hazardous areas	
EU-type examination certificate	BVS 16 ATEX E 098 X
Marking	Ⓔ II 2G Ex eb q IIC T4 Gb Ⓔ II 2D Ex tb IIIC T85°C Db
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013, EN 60079-5:2015, EN 60079-7:2015, EN 60079-31:2014
International approvals	
IECEx approval	IECEx BVS 16.0063X
Approved for	Ex eb q IIC T4 Gb Ex tb IIIC T85°C Db
Standards	IEC 60079-0:2011 , IEC 60079-5:2015 , IEC 60079-7:2015 , IEC 60079-31:2013



DC Power Supply PSU1200-J2-DC-N0

- Certified for ATEX and IECEx Zone 2/22
- Galvanic isolation between input and output
- Provides an output power up to 80 W at 24 V DC
- Fully IP66 rated

DC Power Supply

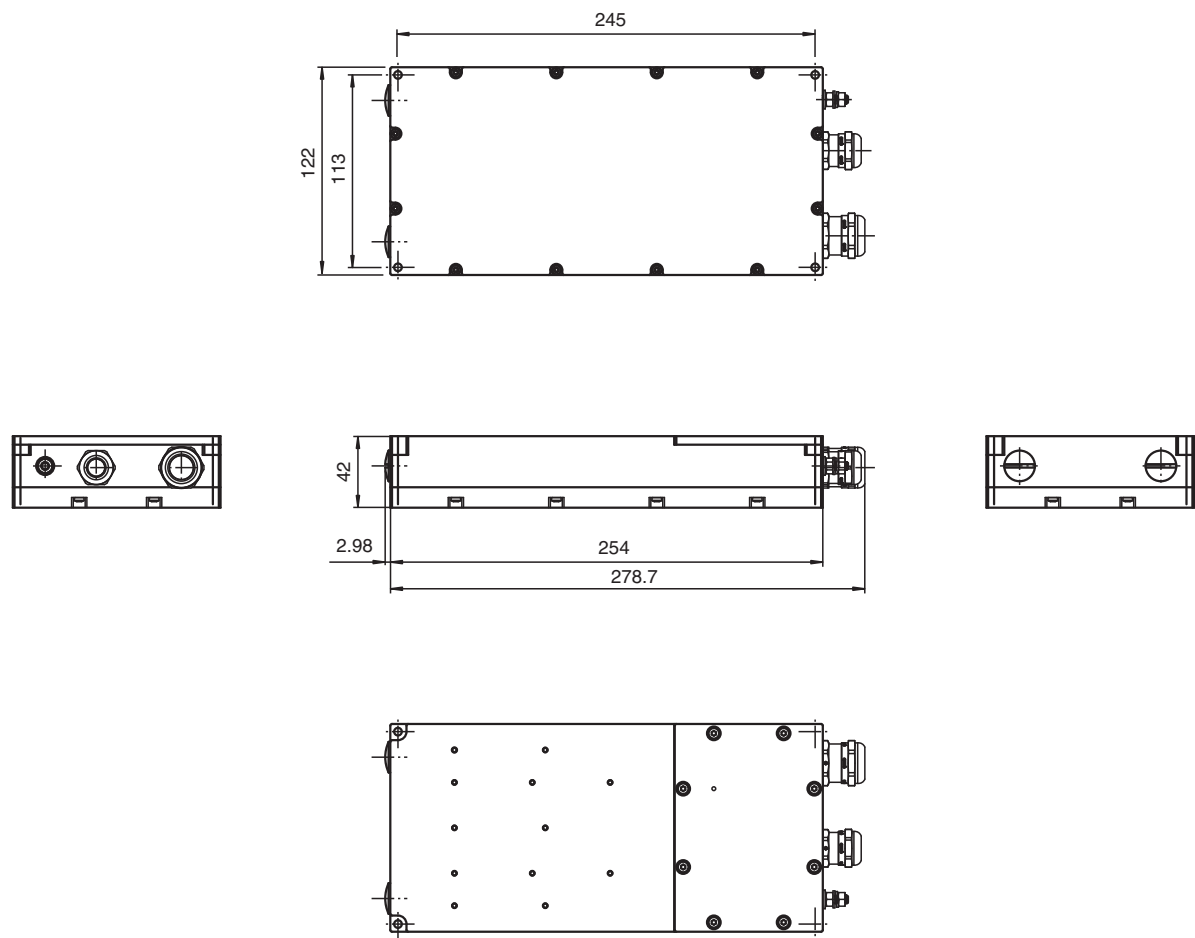


Function

The device is an apparatus certified for use in hazardous area rated according to ATEX directive and IECEx Zones 2 and 22.
The device is a DC-DC power supply and supplies explosion-protected equipment in the hazardous area. The device provides an output voltage of 24 V DC based on 18 V to 36 V DC input voltage.
The output power has a derating from 50 °C to 65 °C (80 W to 50 W).
The device is optimized for use with the following devices:

- Display Unit DPU1200-J2-*
- Thin Client Unit TCU1200-J2-*
- PC Unit PCU1200-J2-*

Dimensions



Technical Data

Supply		
Input voltage		18 ... 36 V DC (SELV/PELV acc. IEC 60950-1)
Input current		max. 5.5 A/2.7 A
Output		
Output current		max. 3.3 A
Voltage		24 V DC (SELV)
Power		80 W with derating
Power dissipation		17 W at 80 W output power
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013 (industrial locations) ; EN 61000-6-4:2007+A1:2011
RoHS		
Directive 2011/65/EU (RoHS)		EN 50581:2012-09
Ambient conditions		
Operating temperature		-20 ... 65 °C (-4 ... 149 °F) with derating
Storage temperature		-20 ... 65 °C (-4 ... 149 °F)
Relative humidity		93% at 40°C, non-condensating, according to EN60068-2-78
Shock resistance		18 shocks 15 g , 11 ms all axis, IEC 60068-2-27
Mechanical specifications		
Core cross section		max. 2.5 mm² (14 AWG)
Degree of protection		IP66
Material		

Technical Data

Housing	anodized aluminum
Mass	approx. 2.5 kg
Dimensions	245 mm x 122 mm x 42 mm
Data for application in connection with hazardous areas	
EU-type examination certificate	BVS 16 ATEX E 097 X
Marking	Ⓔ II 3G Ex ec q IIC T4 Gc Ⓔ II 3D Ex tc IIIC T85°C Dc
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012+A11:2013, EN 60079-5:2015, EN 60079-7:2015, EN 60079-31:2014
International approvals	
IECEx approval	IECEx BVS 16.0063X
Approved for	Ex ec q IIC T4 Gc Ex tc IIIC T85°C Dc
Standards	IEC 60079-0:2011 , IEC 60079-5:2015 , IEC 60079-7:2015 , IEC 60079-31:2013



AC Power Supply PSU1100-J1-AC-N0

- Certified for ATEX and IECEx Zone 1/21
- Galvanic isolation between input and output
- Provides an output power up to 80 W at 24 V DC
- Fully IP66 rated

AC Power Supply



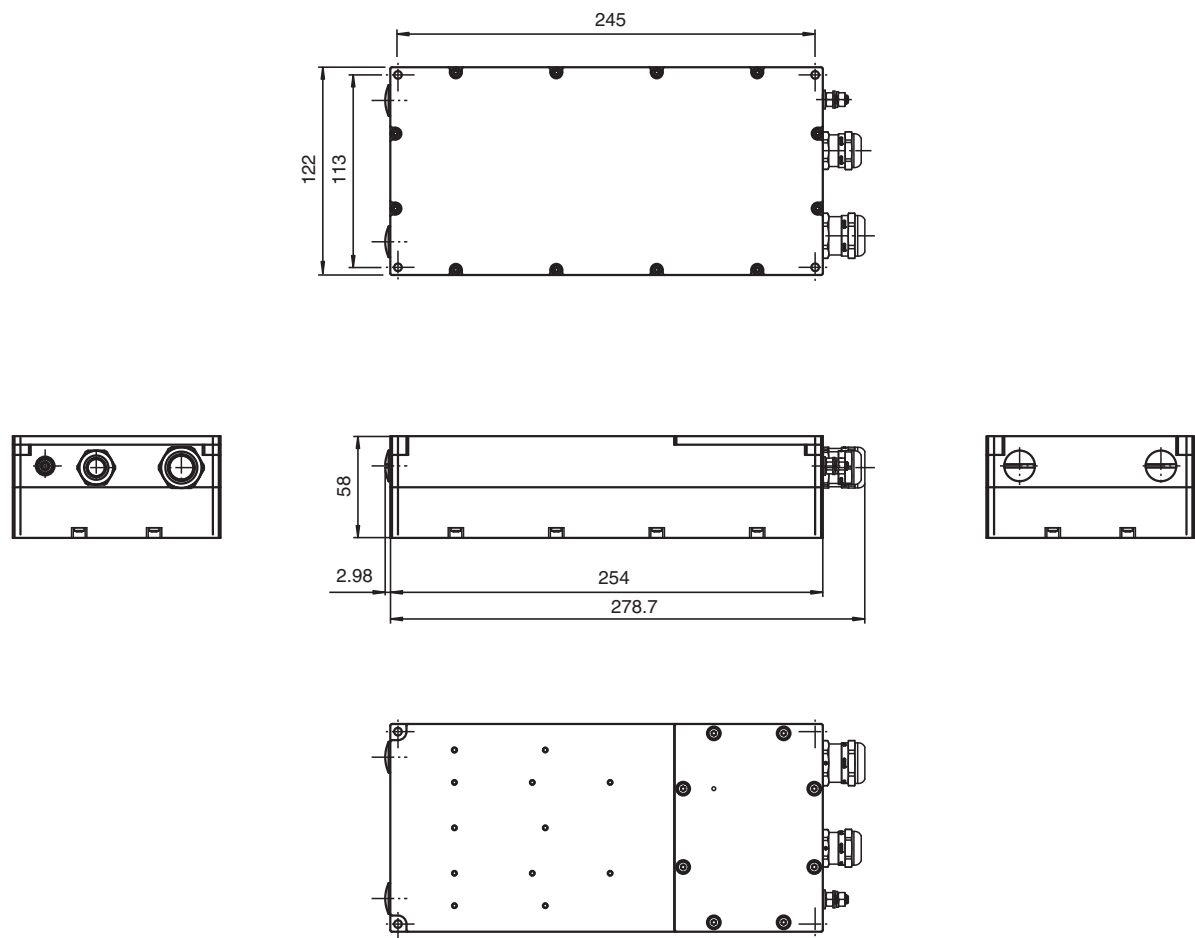
Function

The device is an apparatus certified for use in explosion-hazardous areas rated according to ATEX directive and IECEx Zones 1 and 21. The device is an AC-DC power supply and supplies explosion protected equipment in the explosion-hazardous area. The device provides an output voltage of 24 V DC based on 115/ 230 V AC input voltage. The output power has a derating from 50 °C to 65 °C (80 W to 50 W).

The device is optimized for use with the following devices:

- Display Unit DPU1100-J1-*
- Thin Client Unit TCU1100-J1-*
- PC Unit PCU1100-J1-*

Dimensions



Technical Data

Supply		
Input voltage		115/230 V AC , 50/60 Hz
Input current		max. 1.5/0.7 A
Output		
Output current		max. 3.3 A
Voltage		24 V DC (SELV)
Power		80 W with derating
Power dissipation		15 W at 80 W output power
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013 (industrial locations) ; EN 61000-6-4:2007+A1:2011
RoHS		
Directive 2011/65/EU (RoHS)		EN 50581:2012-09
Ambient conditions		
Operating temperature		-20 ... 65 °C (-4 ... 149 °F) with derating
Storage temperature		-20 ... 65 °C (-4 ... 149 °F)
Relative humidity		93% at 40°C, non-condensating, according to EN 60068-2-78
Shock resistance		18 shocks 15 g , 11 ms all axis, IEC 60068-2-27
Mechanical specifications		
Core cross section		max. 2.5 mm ² (14 AWG)
Degree of protection		IP66
Material		

Technical Data

Housing		anodized aluminum
Mass		approx. 3.2 kg
Dimensions		245 mm x 122 mm x 58 mm
Data for application in connection with hazardous areas		
EU-type examination certificate		BVS 16 ATEX E 098 X
Marking		Ⓔ II 2G Ex eb q IIC T4 Gb Ⓔ II 2D Ex tb IIIC T85°C Db
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2012+A11:2013, EN 60079-5:2015, EN 60079-7:2015, EN 60079-31:2014
International approvals		
IECEx approval		IECEx BVS 16.0063X
Approved for		Ex eb q IIC T4 Gb Ex tb IIIC T85°C Db
Standards		IEC 60079-0:2011 , IEC 60079-5:2015 , IEC 60079-7:2015 , IEC 60079-31:2013



AC Power Supply PSU1200-J2-AC-N0

- Certified for ATEX and IECEx Zone 2/22
- Galvanic isolation between input and output
- Provides an output power up to 80 W at 24 V DC
- Fully IP66 rated

AC Power Supply

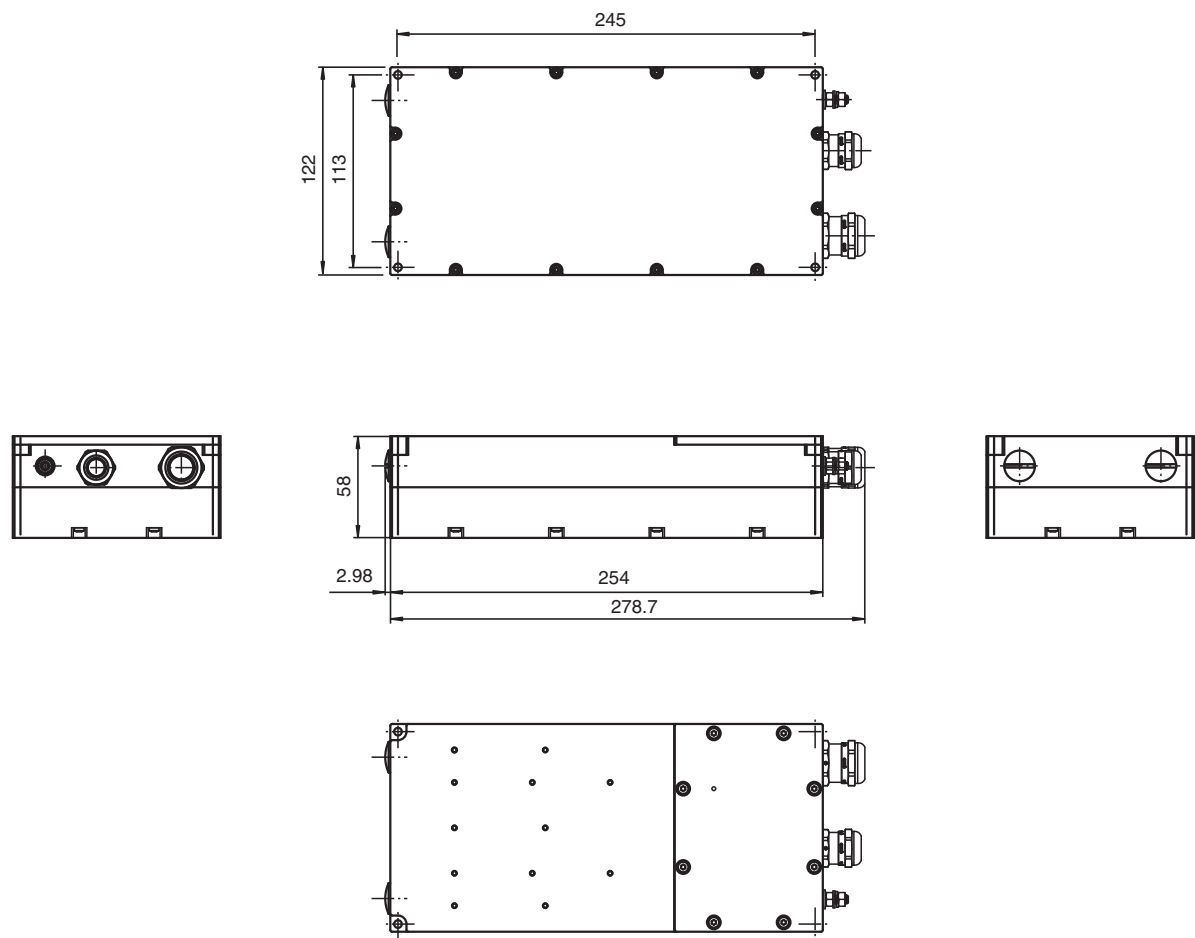


Function

The device is an apparatus certified for use in hazardous areas rated according to ATEX directive and IECEx Zones 2 and 22. The device is an AC-DC power supply and supplies explosion-protected equipment in the hazardous area. The device provides an output voltage of 24 V DC based on 110 V AC/230 V AC input voltage. The output power has a derating from 50 °C to 65 °C (80 W to 50 W). The device is optimized for use with the following devices:

- Display Unit DPU1200-J2-*
- Thin Client Unit TCU1200-J2-*
- PC Unit PCU1200-J2-*

Dimensions



Technical Data

Supply		
Input voltage		115/230 V AC , 50/60 Hz
Input current		max. 1.5/0.7 A
Output		
Output current		max. 3.3 A
Voltage		24 V DC (SELV)
Power		80 W with derating
Power dissipation		15 W at 80 W output power
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013 (industrial locations) ; EN 61000-6-4:2007+A1:2011
RoHS		
Directive 2011/65/EU (RoHS)		EN 50581:2012-09
Ambient conditions		
Operating temperature		-20 ... 65 °C (-4 ... 149 °F) with derating
Storage temperature		-20 ... 65 °C (-4 ... 149 °F)
Relative humidity		93% at 40°C, non-condensating, according to EN 60068-2-78
Shock resistance		18 shocks 15 g , 11 ms all axis, IEC 60068-2-27
Mechanical specifications		
Core cross section		max. 2.5 mm ² (14 AWG)
Degree of protection		IP66
Material		

Technical Data

Housing		anodized aluminum
Mass		approx. 3.2 kg
Dimensions		245 mm x 122 mm x 58 mm
Data for application in connection with hazardous areas		
EU-type examination certificate		BVS 16 ATEX E 097 X
Marking		Ⓔ II 3G Ex ec q IIC T4 Gc Ⓔ II 3D Ex tc IIIC T85°C Dc
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2012+A11:2013, EN 60079-5:2015, EN 60079-7:2015, EN 60079-31:2014
International approvals		
IECEx approval		IECEx BVS 16.0063X
Approved for		Ex ec q IIC T4 Gc Ex tc IIIC T85°C Dc
Standards		IEC 60079-0:2011 , IEC 60079-5:2015 , IEC 60079-7:2015 , IEC 60079-31:2013



Industrial Ethernet Media Converter

SL-2ES-2SC

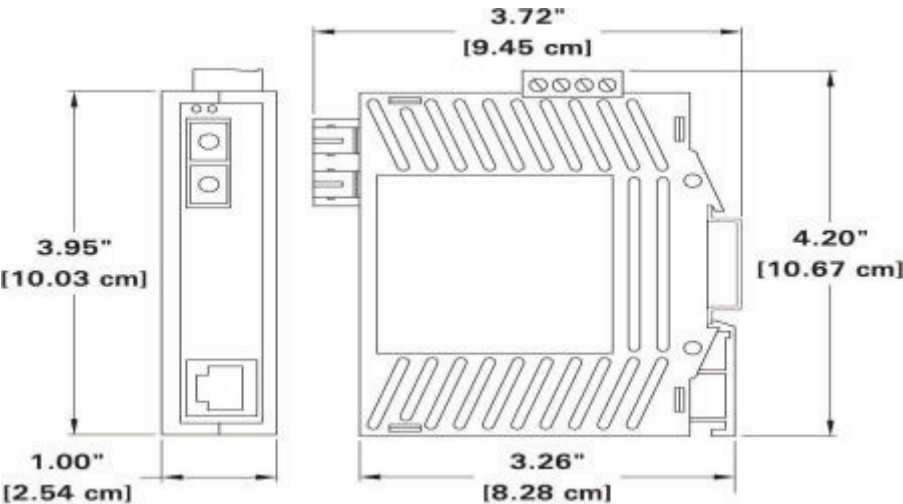
- Slim packaging fits on your DIN rail
- High performance and value
- Truly industrial hardened design
- Dual power inputs keeps you running
- UL/CSA, CE, Hazardous Locations (Zone 2) and Maritime rated
- Ultra-reliable 1,000,000+ hours MTBF
- Fiber multimode (mm) typical: 50 or 62.5/125 μ m
- Fiber max. distance: (full duplex) 4 km (multimode)

Industrial Ethernet Media Converter

Function

The SL-2ES is an industrial Ethernet copper to fiber media converter that provides fast performance allowing for real-time operation. These ruggedized converters are industrial hardened to provide superior reliability. They require no user setup and immediately start operating as soon as you power them up.

Dimensions



Technical Data

Supply	
Input voltage	10 ... 30 VDC (Redundant)
Power consumption	2 W typical
Indicators/operating means	
Input devices	fiber optic (multimode) SC connectors
Directive conformity	
Electromagnetic compatibility	FCC part 15, ICES-003; EN61000-6-4, CE EN61000-6-2, CE
Ambient conditions	
Operating temperature	-10 ... 60 °C (14 ... 140 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Relative humidity	5 ... 95 %, noncondensing
Vibration resistance	IEC60068-2-6
Mechanical specifications	

Technical Data

Degree of protection	IP30
Connection	SC type
Material	Case: UL94V0 Lexan
Mass	0.11 kg
Dimensions	see mechanical drawing
Mounting	DIN rail or direct panel mounting
Data for application in connection with hazardous areas	
EU-type examination certificate	EN60079-15 (Zone 2, Category 3), CE
International approvals	
UL approval	UL 508/CSA C22.2/14, EN61010-1, CE UL 1604/CSA C22.2/213 (Class I, Div. 2)

Features

- Military-grade fiber optic single-mode cable for easy connectivity of Pepperl+Fuchs thin client / PC units

Application

DATL-FO-SM-LC-SC-* cables allow plug-and-play fiber optic network connectivity to Pepperl+Fuchs thin client/PC units, even in hazardous locations.

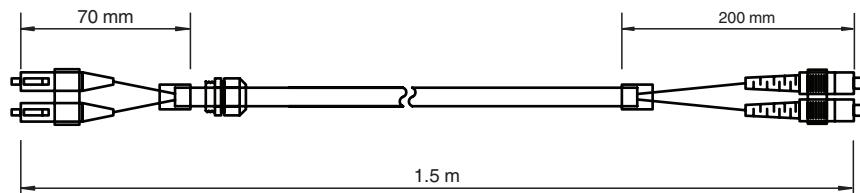
The military-grade cables ensure full IP66 protection of the connection opening. The cable ends consist of an Ex e rated M16 cable gland and a duplex LC to duplex SC connector.



Mechanical specifications

Connection	duplex LC to duplex SC with 1 M16 cable gland
Material	single-mode fiber optic , OS2 , 9/125 μm
Cable length	1.5 m

Dimensions



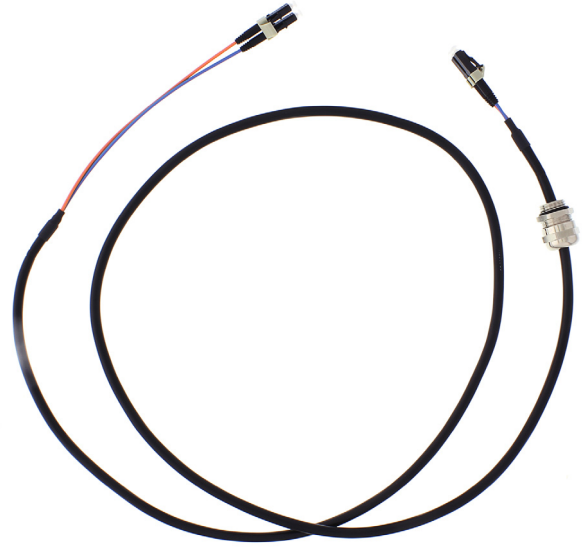
Features

- Military-grade fiber optic single-mode cable for easy connectivity of Pepperl+Fuchs thin client / PC units

Application

DATL-FO-SM-LC-LC-* cables allow plug-and-play fiber optic network connectivity to Pepperl+Fuchs thin client/PC units, even in hazardous locations.

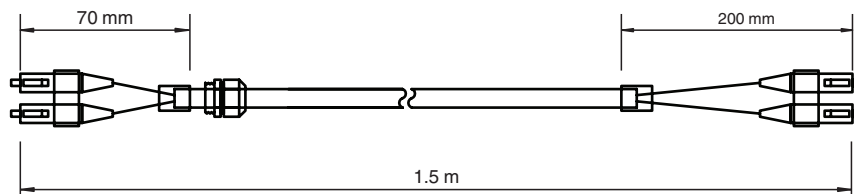
The military-grade cables ensure full IP66 protection of the connection opening. The cable ends consist of an Ex e rated M16 cable gland and a duplex LC to duplex LC connector.



Mechanical specifications

Connection	duplex LC to duplex LC with 1 M16 cable gland
Material	single-mode fiber optic , OS2 , 9/125 μm
Cable length	1.5 m

Dimensions



Raritan Dominion KVM-over-IP Switch

DKX4-101



- Allows direct connection from a VisuNet Remote Monitor (with RM Shell 5.2 or newer) to a host system
- Supports concurrent remote and local access to an Operator Workstation

Raritan Dominion KVM-over-IP Switch

Technical Data

Supply

Input voltage	5 V DC
Power supply	100 ... 240 V 50-60Hz, 12.5 W / 20 W max/operating

Interface

Interface type	Front side: 1 x DC, 1x Ethernet, Serial Admin, 1x USB-B to Server, HDMI to Server Back side: HDMI out, USB K/M, Terminal Block. Factory Reset Button
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Ambient conditions

Operating temperature	0 ... 55 °C (32 ... 131 °F)
Relative humidity	20 % ... 80 %

Mechanical specifications

Connection	Local connection: HDMI passthrough port, 2x USB-A port for keyboard and mouse control Remote connection: 1 Gigabit Ethernet (RJ-45) port IPv6/IPv4 dual stack, TCP/IP
Mass	0.65 kg
Dimensions	140 mm x 144 mm x 30 mm (l x w x h)
Mounting	Zero-U form factor; rack mountable vertically or horizontally (bracket kit included)

General information

Scope of delivery	1 locking power cord 1 HDMI cable 1 USB-B to USB-A cable 1 mounting bracket kit
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Fiber Optic Multi-Mode Breakout Cable

DATL-FO-MM-*

- Military-grade fiber optic multi-mode cable for easy connectivity of Pepperl+Fuchs thin client / PC units
- Available with duplex LC to LC or LC to SC connectors

Fiber Optic Multi-Mode Breakout Cable



Function

DATL-FO-MM-* cables allow plug-and-play fiber optic network connectivity to Pepperl+Fuchs thin client/PC units, even in hazardous locations. The military-grade cables ensure full IP66 protection of the connection opening. The cable ends consist of an Ex e rated M16 cable gland and a duplex LC to duplex LC/SC connector.

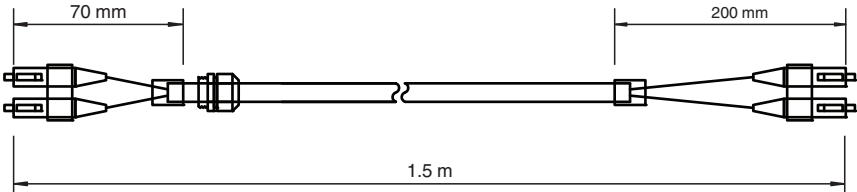
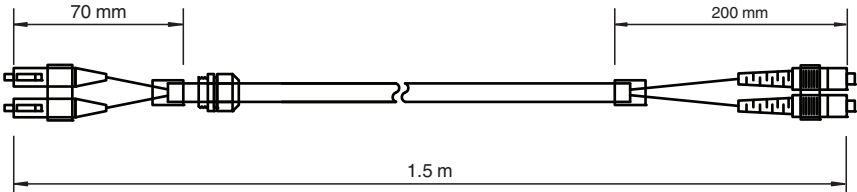
Technical Data

Mechanical specifications		
Connection		duplex LC to duplex LC or duplex LC to duplex SC
Material		multi-mode fiber optic , OM2 , 50/125 µm
Cable length		1.5 m

Ordering Information

Part Number	Model Number	Description	Product Photo
548313	DATL-FO-MM-LC-LC-15	<div>Military-grade fiber optic breakout cable for use with TCU/PCU1X00</div> <ul style="list-style-type: none">Duplex LC to duplex LC1 x M16 cable glandMulti-mode, 50/125 μm, OM2Cable length: 1.5 mincludes LC-LC coupling	
548311	DATL-FO-MM-LC-SC-15	<div>Military-grade fiber optic breakout cable for use with TCU/PCU1X00</div> <ul style="list-style-type: none">Duplex LC to duplex SC1 x M16 cable glandMulti-mode, 50/125 μm, OM2Cable length: 1.5 mincludes SC-SC coupling	

Dimensions

DATL-FO-MM-LC-LC-15	
DATL-FO-MM-LC-SC-15	

Div 2 KVM extender kit

SK-KVM-xxx-NR-20-CR-N Series



- Locate an operator workstation up to 300 m from server or pc
- Operate keyboard, mouse, and monitor safely in a Div 2 hazardous area
- Easy installation and operation

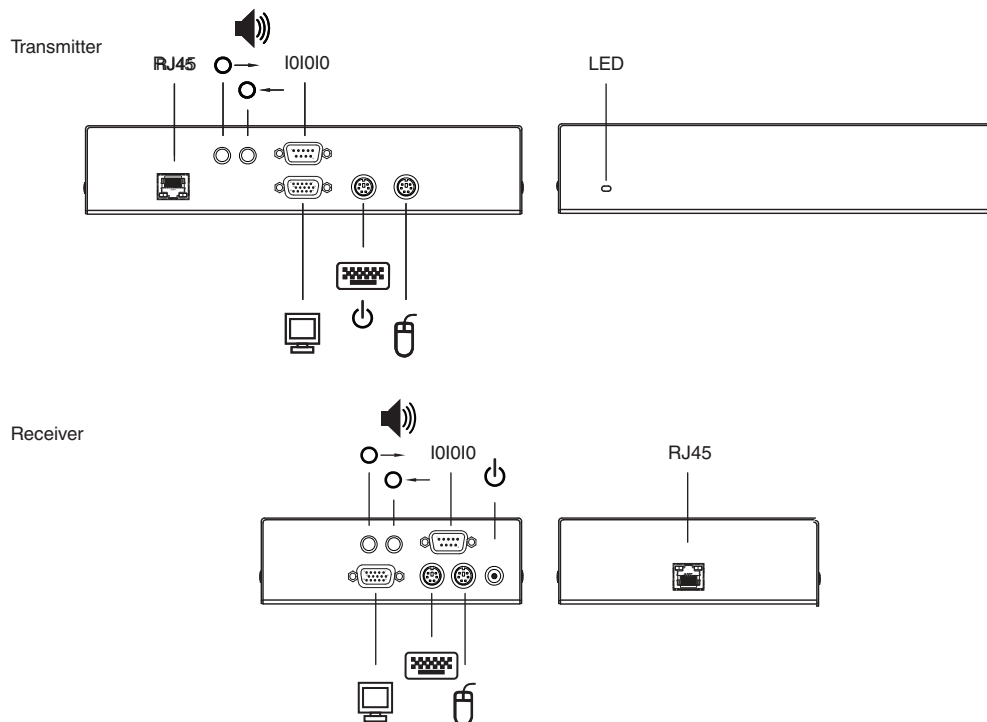
VGA to CAT5 KVM kit



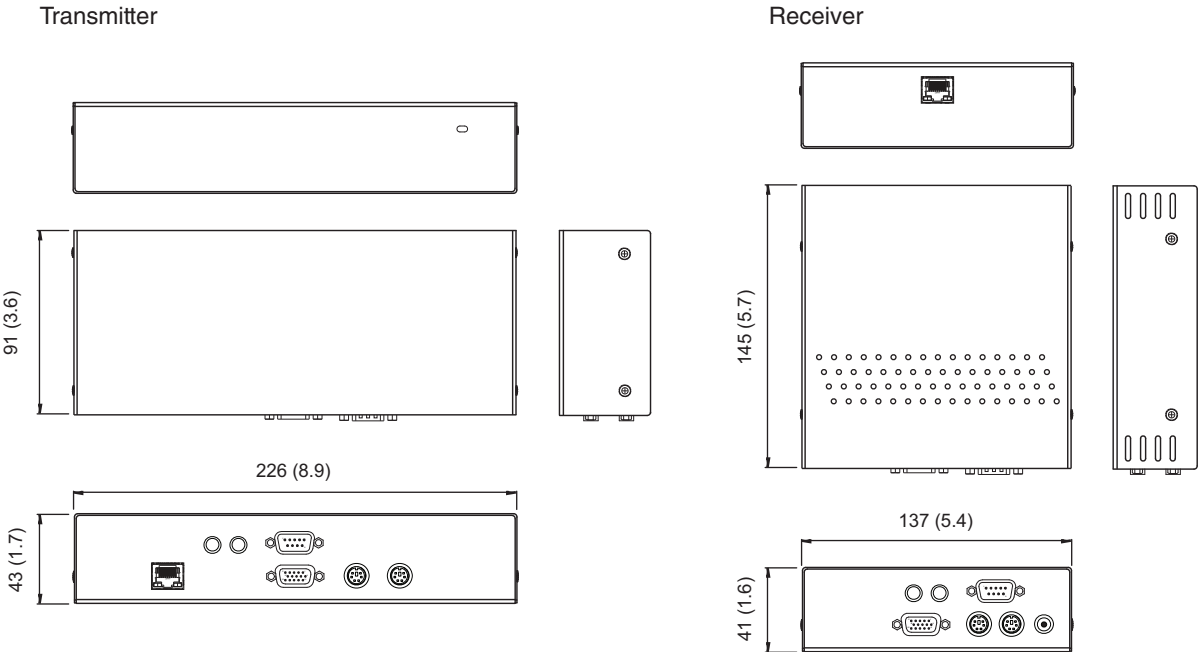
Function

The Pepperl + Fuchs KVM extender SK-KVM-xxx-NR-20-CR-N is a CAT5 to VGA/ PS2 converter for use in Division 2 Hazardous areas. The system consists of two units, a transmitter and a receiver. The transmitter connects to your CPU. The receiver connects to a PS2 keyboard, VGA , and PS2 mouse or KVM station. The transmitter and receiver are connected together with CAT5 Ethernet cable.

Connection



Dimensions



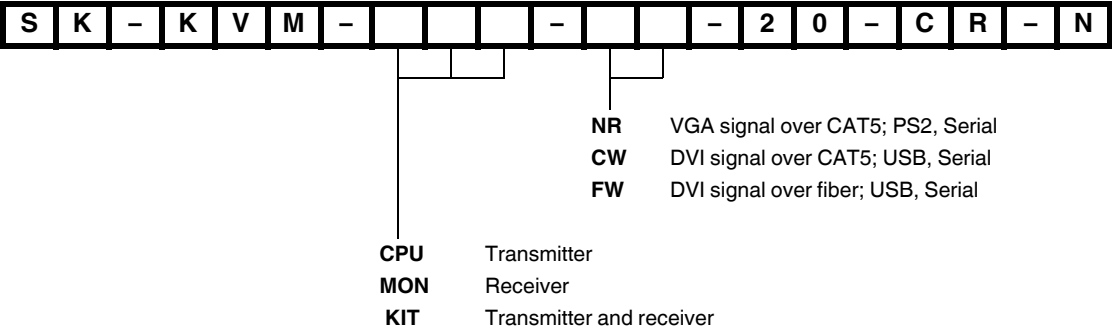
Technical Data

General specifications		
Resolution		1600 x 1200 @ 60 Hz 1280 x 1024 @ 75 Hz
Distance		200 m (650 ft) @ 1600 x 1200 300 m (1000 ft) @ 1280 x 1024
Supply		
Power consumption		12 V DC @ 10 W max
Indicators/operating means		
Indicators		Video check: LED
Input devices		VGA - HD15M/F 2 x PS2 (keyboard and mouse) 1 x RS232 (touchscreen) 1 x RJ45 (CAT5e/6)
Serial data		
Baud rate		19.2 KBd max
Flow control		RTS, CTS, DTR, DSR

Technical Data

Audio data		
Drive capability		4 V p-p
Impedance		47 kΩ
Connector type		3.5 mm stereo jack
Transmission method		16 bit, 38.4 KHz digitized audio
Speaker		powered
Directive conformity		
Electromagnetic compatibility		
Directive 89/336/EEC		EN55022A, EN 55024, EN61000-3-2, EN61000-3-3, IEC6100-4-2, IEC6100-4-3, IEC6100-4-4, IEC6100-4-5
Low voltage		
Directive 73/23/EEC		EN60950
Ambient conditions		
Operating temperature		0 ... 45 °C (32 ... 113 °F)
Storage temperature		-25 ... 60 °C (-13 ... 140 °F)
Mechanical specifications		
Mass		1.3 kg
Dimensions		197 mm x 100 mm x 35 mm (7.8 inch x 3.9 inch x 1.4 inch)
International approvals		
UL approval		UL Class I/Div 2

Type code





Div 2 KVM extender kit SK-KVM-xxx-CW-20-CR-N Series

- Locate an operator workstation up to 120 m from server or pc
- Operate keyboard, mouse, and monitor safely in a Div 2 hazardous area
- Transparent operation between computer and monitor
- Automatic skew compensation

DVI to CAT5 KVM kit

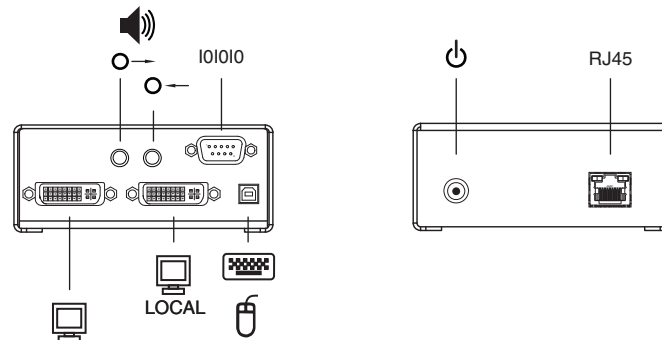


Function

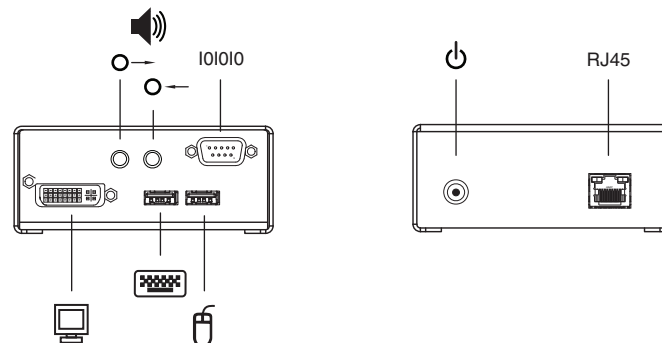
The Pepperl + Fuchs KVM extender SK-KVM-xxx-CW-20-CR-N is a CAT 5 to DVI/USB converter for use in Division 2 Hazardous areas. The system consists of two units, a transmitter and a receiver. The transmitter connects to your CPU. The receiver connects to a USB keyboard, DVI-D monitor, and USB mouse or KVM station. The transmitter and receiver are connected together with CAT5 Ethernet cable.

Connection

Transmitter

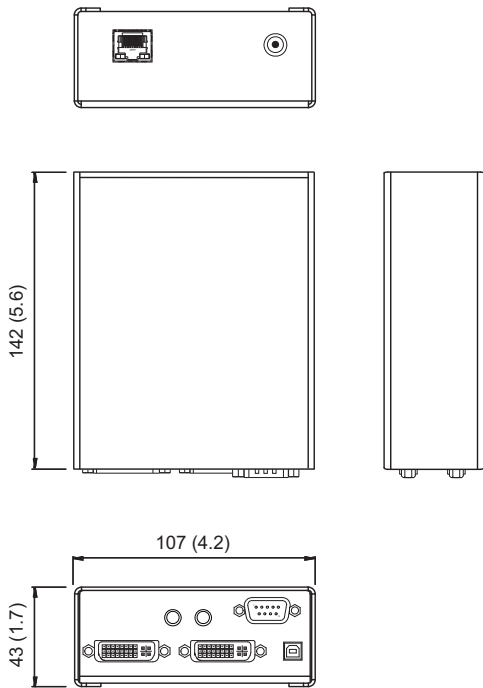


Receiver

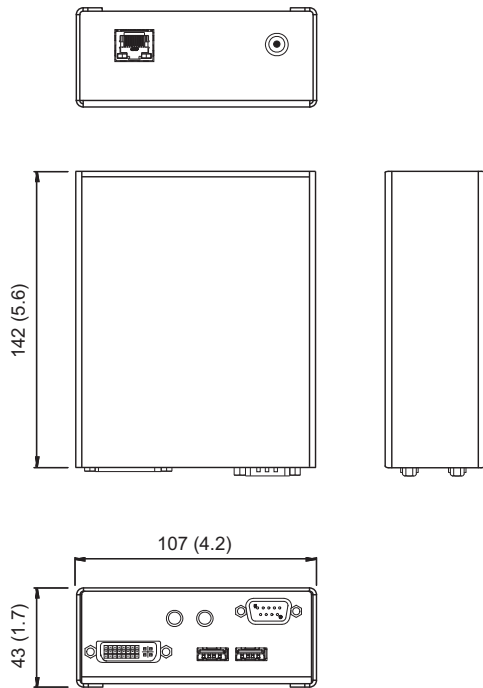


Dimensions

Transmitter



Receiver



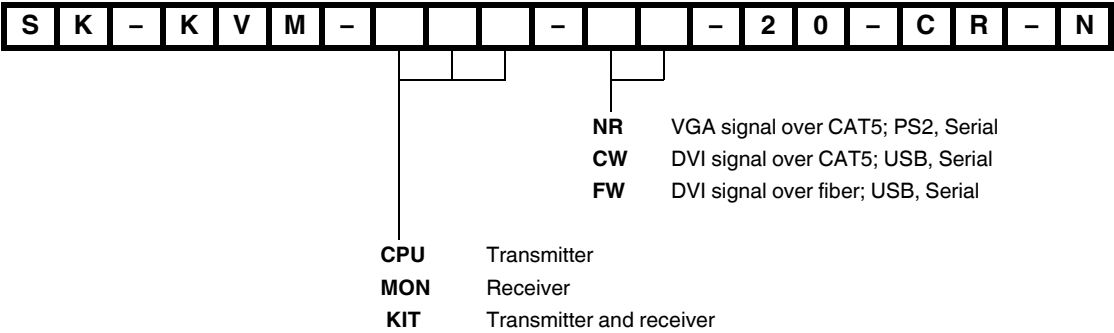
Technical Data

General specifications		
Resolution	Maximum resolution: 1920 x 1200 @ 60 Hz	
Distance		120 m (400 ft)
Supply		
Power consumption		5 V DC @ 10 W max
Indicators/operating means		
Indicators		Front panel: power Video check: LED
Input devices		29-pin DVI-D 2 x USB Type A (keyboard and mouse/touchscreen) 1 x RS232 (touchscreen) 1 x RJ45 (CAT5e/6)
Serial data		
Baud rate		19.2 KBd max
Flow control		RTS, CTS, DTR, DSR
Audio data		
Drive capability		5 V p-p
Impedance		47 kΩ
Connector type		3.5 mm stereo jack
Transmission method		16 bit, 38.4 KHz digitized audio
Speaker		powered
Directive conformity		
Electromagnetic compatibility		
Directive 89/336/EEC		EN55022A, EN 55024, EN61000-3-2, EN61000-3-3, IEC6100-4-2, IEC6100-4-3, IEC6100-4-4, IEC6100-4-5
Low voltage		
Directive 73/23/EEC		EN60950
Ambient conditions		
Operating temperature		0 ... 50 °C (32 ... 122 °F)
Storage temperature		-25 ... 60 °C (-13 ... 140 °F)
Mechanical specifications		

Technical Data

Mass	0.3 kg
Dimensions	105 mm x 133 mm x 35 mm (4.1 inch x 5.3 inch x 1.4 inch)
International approvals	
UL approval	UL Class I/Div 2

Type code



Div 2 KVM extender kit

SK-KVM-xxx-FW-20-CR-N Series



- Locate an operator workstation up to 400 m from server or pc
- Operate keyboard, mouse, and monitor safely in a Div 2 hazardous area
- Automatic skew compensation
- Supports multimode fiber-optic cables

DVI to fiber KVM kit

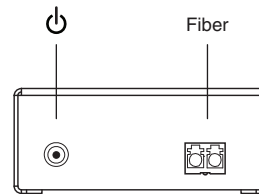
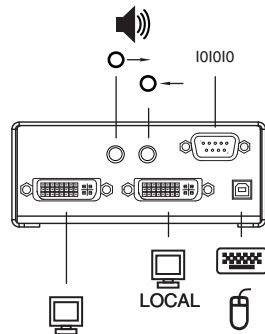


Function

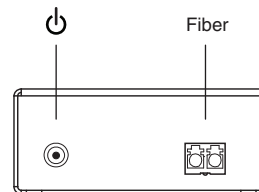
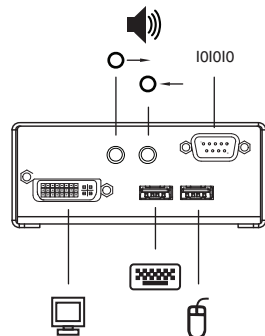
The Pepperl + Fuchs KVM extender SK-KVM-xxx-FW-20-CR-N is a DVI to Fiber converter for use in Division 2 Hazardous areas. The system consists of two units, a transmitter and a receiver. The transmitter connects to your CPU. The receiver connects to a USB keyboard, DVI-D monitor, and USB mouse or KVM station. The transmitter and receiver are connected together with fiber optic cable.

Connection

Transmitter

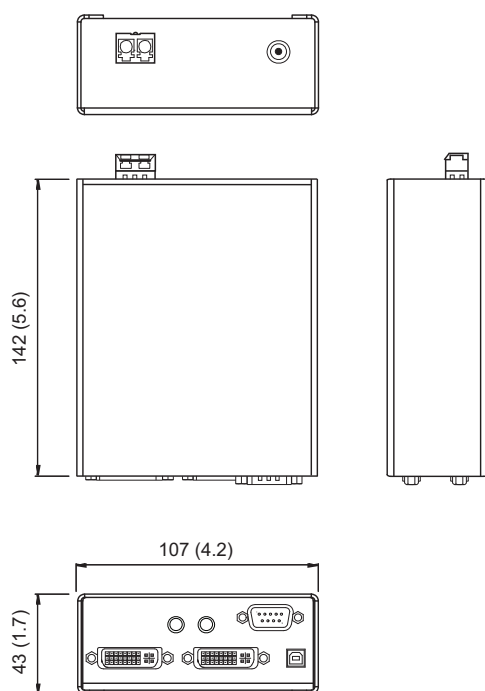


Receiver

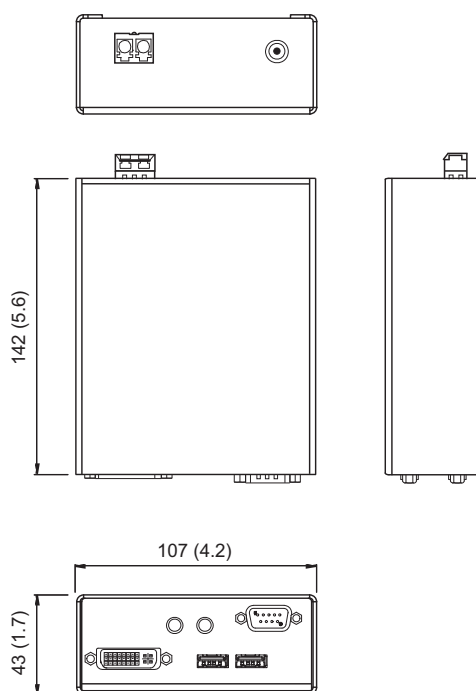


Dimensions

Transmitter



Receiver



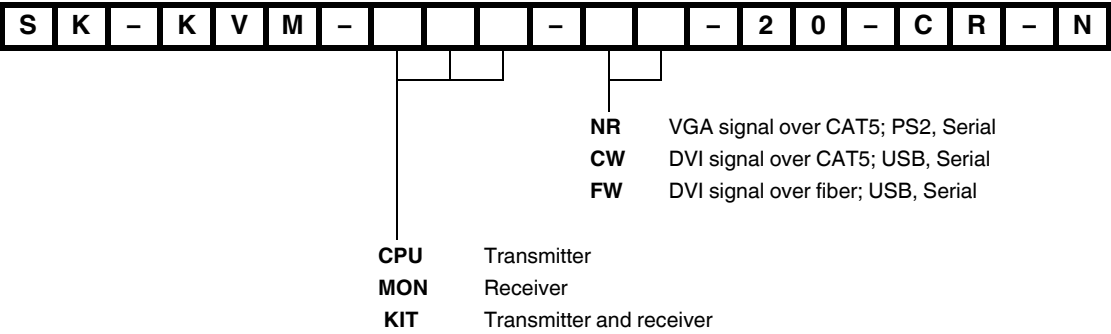
Technical Data

General specifications		
Resolution		Maximum resolution: 1920 x 1200 @ 60 Hz
Distance		200 m (650 ft) 62.5 μm multimode 400 m (1300 ft) 50.0 μm multimode
Supply		
Power consumption		5 V DC @ 10 W max
Indicators/operating means		
Indicators		Front panel: power Video check: LED
Input devices		29-pin DVI-D 2 x USB Type A (keyboard and mouse/touchscreen) 1 x RS232 (touchscreen) fiber optic (multi-mode) - LC connectors
Serial data		
Baud rate		19.2 KBd max
Flow control		RTS, CTS, DTR, DSR
Audio data		
Drive capability		5 V p-p
Impedance		47 kΩ
Connector type		3.5 mm stereo jack
Transmission method		16 bit, 38.4 KHz digitized audio
Speaker		powered
Directive conformity		
Electromagnetic compatibility		
Directive 89/336/EEC		EN55022A, EN 55024, EN61000-3-2, EN61000-3-3, IEC6100-4-2, IEC6100-4-3, IEC6100-4-4, IEC6100-4-5
Low voltage		
Directive 73/23/EEC		EN60950
Ambient conditions		
Operating temperature		0 ... 50 °C (32 ... 122 °F)
Storage temperature		-25 ... 60 °C (-13 ... 140 °F)

Technical Data

Mechanical specifications		
Mass		0.3 kg
Dimensions	105 mm x 133 mm x 35 mm (4.1 inch x 5.3 inch x 1.4 inch)	
International approvals		
UL approval	UL Class I/Div 2	

Type code



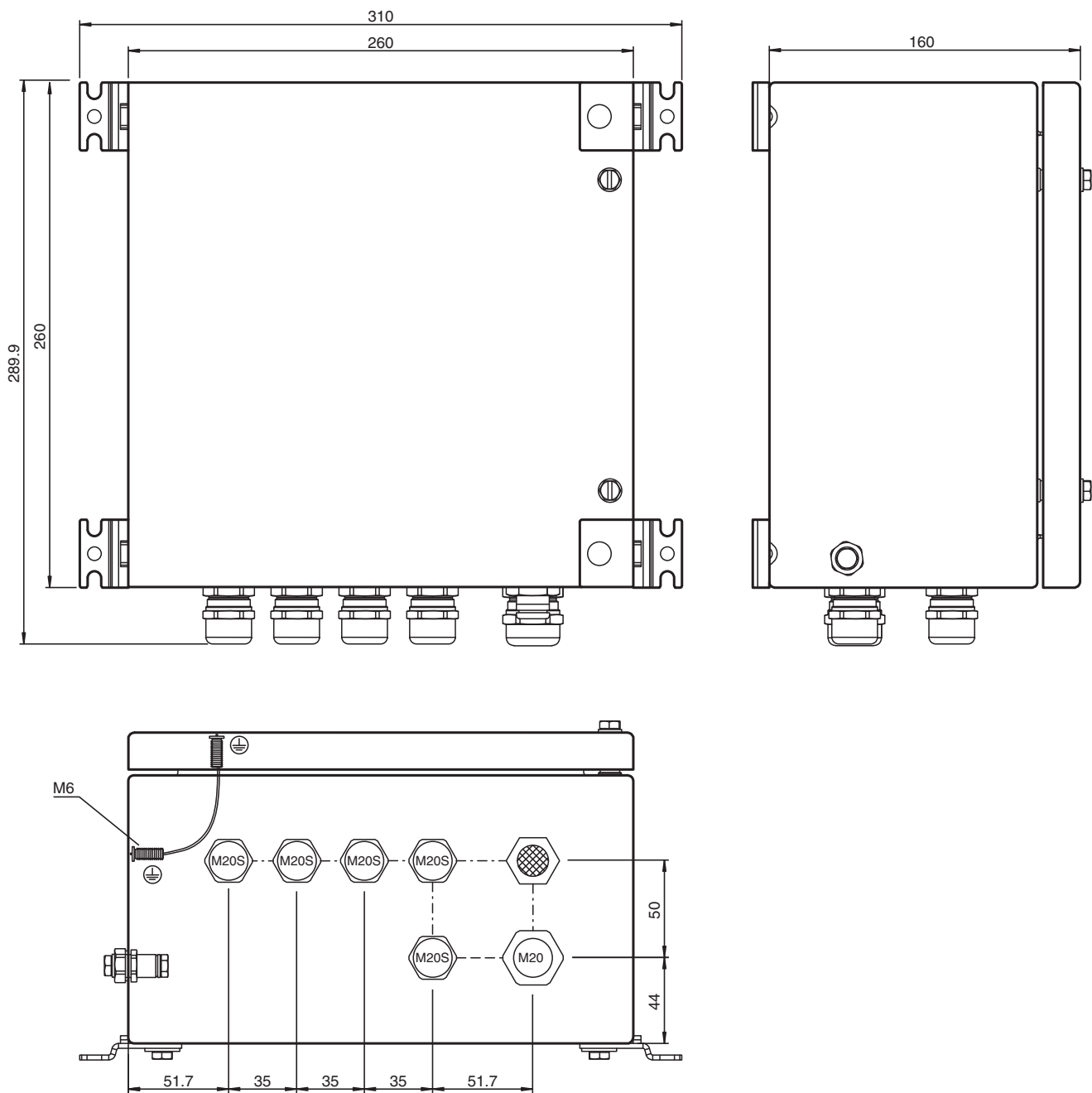
Fiber Optic Media Converter Box

PSC2.CP.SR.26.26.16-Y7017109*



- Extended communication range: Fiber optics allow Ethernet devices to communicate over greater distances, enhancing network flexibility
- Connect up to 4 Ethernet devices to a fiber optic network: Enables integration of multiple devices, improving scalability and efficiency
- Suitable for outdoor use: Stainless steel and high temperature rating make it suitable for extreme conditions
- High installation flexibility: Supports Single Mode & Multi Mode Fiber Optic and AC / DC power options, adapting to various environments
- Certified for hazardous areas: ATEX / IECEx Zone 2/22 and NEC Class I, II, Div. 2 certification ensures safety in potentially explosive atmospheres, ideal for industrial settings

Dimensions



Technical Data

Supply		
Rated voltage	U _r	AC: 100 ... 240 V 50/60 Hz DC: 24 V
Input current		AC: 1.09 A DC: 0.1 A
Interface		
Interface type		Ethernet Interface 4 x 10/100BaseT(X) Ports (RJ45 connector) All models support: - Auto negotiation speed - Full/half duplex mode - Auto MDI/MDI-X connection
Communication		IEEE 802.3 for 10BASE-T IEEE 802.3u for 100BaseT(X) and 100BaseFX IEEE 802.3x for flow control
Ambient conditions		

Technical Data

Ambient temperature	-25 ... 50 °C (-13 ... 122 °F)	
Operating temperature		-20 ... 50 °C (-4 ... 122 °F)
Relative humidity	5 ... 95 %, non-condensing	
Mechanical specifications		
Degree of protection	IP66 / Type 4X	
Material		
Housing	316L stainless steel Enclosure cover: Fully detachable Cover fixing: Stainless steel A4 (V4A) hexagonal head screws, optional quarter-turn key locks	
Surface		brushed finish
Dimensions	260 mm x 260 mm x 160 mm	
International approvals		
ETL approval		
ETL marking		Class I Division 2 Groups ABCD T4 Class II Division 2 Groups FG T135°C
Approved for	Suitable for Class I, Division 2 Groups B,C,D T4 For ETLusNFPA 70 (NEC) UL50-2007 UL50E-2007 UL508A UL 121201 For cETL CSA C22.2 No.14 CSA22.1-12 (CEC) CSA C22.2 No. 94.1-07 CSA C22.2 No. 94.2-07 CSA C22.2 No. 213	
Approved for		ATEX / IECEx Zone 2/22 NEC Class I, II Div. 2

Additional Information

Cable Entries max. Quantity

Options	Part No.	Attributes	Cable entry area	
			M20	M20s
PSC2.CP.SR.26.26.16 - Y70171096	70171096	AC / Single Mode	1	5
PSC2.CP.SR.26.26.16 - Y70171097	70171097	AC / Multimode	1	5
PSC2.CP.SR.26.26.16 - Y70171098	70171098	DC / Single Mode	0	6
PSC2.CP.SR.26.26.16 - Y70171099	70171099	DC / Multimode	0	6

Optical specifications

		100BaseFX		
		Multimode		Single mode
Fiber Cable Type		OM1	50/125 µm 800 MHz x km	G.652
Typical distance		4 km	5 km	40 km
Wavelength	Typical (nm)	1300		1310
	TX Range (nm)	1260 to 1360		1280 to 1340
	RX Range (nm)	1100 to 1600		1100 to 1600
Optical Power	TX Range (dBm)	-10 -to 20		0 to -5
	RX Range (dBm)	-3 to -32		-3 to -34
	Link Budget (dB)	12		29
	Dispersion Penalty (dB)	3		1

Please find further information about the cable lengths and their calculation in the manual.

F.O. interface module SK-KVM

The Fibre Optic data interface SK-KVM is the optical galvanic isolator for the iPC-EX system. It must be installed in the safe area close to the PC. The SK-KVM can be connected to the standard 'PS/2 mouse' and 'PS/2 keyboard' ports or to the standard graphics port of the PC.



The SK-KVM is enclosed in a desktop case and supplied with power by means of a 24V plug-in power supply unit. Support plates are optionally available for 19" systems (2 HE, 84 TE), Type 'COVER19K'

Technical data

	SK-KVM
Degree of protection:	
Degree of protection:	IP 20
Ambient conditions (operation):	
Temperature range:	0 °C – +50 °C
Relative humidity:	Max. 85% without condensation (48 h endurance test)
Ambient conditions (storage):	
Temperature range:	-10 °C – +70 °C
Mechanical data:	
Weight:	Approx. 1.0 kg
Material:	Aluminium desktop case
Dimensions (W x H x D) in mm:	200 x 70 x 190
Supply voltage:	24V DC \pm 20% (approx. 0,8 A)
Laser data transmission Tx:	
Laser class:	1 (meet IEC 60825-1 and FDA 21 CFR 1040.10 u. 1040.11)
Wave length:	830 – 860 nm
maximum subdue:	-7.5 dBm
Max. cable length:	
Max. cable length:	Connection between PC and SK-KVM: max. 2m

1-D/2-D Code Handheld Reader



- **CBL-IDMx60-D-J1-S-C38-N0**
- Connecting cable

Connection cable for IDM-Z1-x6x-D-* corded Handheld Readers, Connection cable for corded IDM-Z1-x6x-D-* 1-D and 2-D handheld Barcode Readers for easy connectivity of Pepperl+Fuchs VisuNet devices, Approved for Zone 1 + 21 (ATEX + IECEx), Compatible to DATL-IDM-DB-S-XX00-N0 (M12 female connector), M12 male connector to RJ50 connector with additional sealing ring



- **CBL-IDMx61-B-N0-U-C38-N0**
- USB connection cable for base station

Accessory cable for IDM-Zx-x6x-M-* Bluetooth® handheld readers, USB connection cable for base station, Non-Ex, for use in safe area only, RJ50 (cradle) to USB Type A connector, Protocol: USB, Compatible with IDM-Zx-x6x-B-N0*



- **DATL-IDM-DB-S-XX00-N0**
- Connecting cable

1 m connector cable for corded handheld reader with M12 connector to open cable end, Connector cable for wired 1-D Scanner IDM-Z1-16x-D-1D-J1-S-* and 2-D Scanner IDM-Z1-26x-D-2D-J1-S* and Bluetooth Basestation IDM-Z1-x6x-B-J1-BT-N0, 4-wire with ferrules, IDM Scanner connection via M12-connector, Note: Supports only RS232 Scanner/Basestation



- **HOLDER-BRACKET-3200-IDMx61-B-N**
- Bracket for 1-D/2-D code handheld readers for VisuNet FLX

Stainless steel bracket to mount IDM-Zx-x6x-B-Jx-BT-N0 base station to AG-3200 housing, Mounting bracket, Simple and fast mounting, Compatible with AG-3200 housing (adapter included), Compatible with 1-D/2-D code handheld reader base stations and chargers



- **HOLDER-BRACKET-XX00-IDMx61-B-N**
- Bracket for 1-D/2-D code handheld readers for VisuNet GXP 21.5"

Stainless steel bracket to mount IDM-Zx-x6x-B-Jx-BT-N0 base station to AG-XX00 housing, Mounting bracket, Simple and fast mounting, Compatible with AG-XX00 housing (adapter included), Compatible with 1-D/2-D code handheld reader base stations and chargers



- **IDM-Z1-x64-B-J1-BT-N0**
- Base station for IDM-Z1-* (Zone 1/21)

Base station for IDM-Z1-* (Zone 1/21), Base/charging station for IDM-Z1-x61-M-* Bluetooth® handheld readers, Certified for ATEX and IECEx Zone 1/21, Bluetooth interface



- **IDM-Z1-x64-B-J1-BT-N0**
- Base station for IDM-Z1-* (Zone 1/21)

Base station for IDM-Z1-* (Zone 1/21), Base/charging station for IDM-Z1-x61-M-* Bluetooth® handheld readers, Certified for ATEX and IECEx Zone 1/21, Bluetooth interface



- **IDM-Z1-x64-B-N0-BT-N0**
- Base station for IDM-Z1-* (Non-hazardous areas)

Base station for IDM-Z1-* (Non-hazardous areas), Base/charging station for IDM-Z1-x61-M-* Bluetooth® handheld readers, Bluetooth interface



- **PSU-IDMx61-BC-N0-N0**
- Power supply

Power supply for IDM* non-Ex base station and charger, AC and DC power supplies for IDM* non-Ex base station and charger, Adapters for EU-type F and US-type B power cords



- **SCANNER-HOLDER-U1-3200-N0**
- Scanner holder for 1-D/2-D code handheld readers for VisuNet FLX

Stainless steel holder for IDMX6x handheld readers and Ident-Ex® 01, compatible with AG-3200 housing, Mounting bracket, Simple and fast mounting, Compatible with AG-3200 housing (adapter included), Compatible with 1-D/2-D code handheld readers such as the IDM and Ident-Ex® portfolios



- **SCANNER-HOLDER-U1-AG1-N0**
- Scanner holder for 1-D/2-D code handheld readers for VisuNet GXP 19"

Stainless steel holder for for IDM-Z1- handheld readers, compatible with AG1 housing, Mounting bracket, Simple and fast mounting, Compatible with AG1 housing (adapter included), Compatible with 1-D/2-D code handheld readers such as the IDM and Ident-Ex® portfolios



- **SCANNER-HOLDER-U1-XX00-N0**
- Scanner holder for 1-D/2-D code handheld readers for VisuNet GXP 21.5"

Stainless steel holder for for IDM-Z1- handheld readers, compatible with AG-XX00 housing, Mounting bracket, Simple and fast mounting, Compatible with AG-XX00 housing (adapter included), Compatible with 1-D/2-D code handheld readers such as the IDM and Ident-Ex® portfolios



- **CBL-IDM160-D-J1-U-C38-N0**
- Connecting cable

Connection cable for IDM-Zx-x6x-D-* corded Handheld Readers, Connection cable for corded IDM-Zx-x6x-D-* 1-D and 2-D handheld Barcode Readers for easy connectivity of Pepperl+Fuchs VisuNet devices, Approved for Zone 1/21 and Zone 2/22 (ATEX + IECEx), Compatible to DATL-IDM-DB-S-XX00-N0 (M12 female connector), M12 male connector to RJ50 connector with additional sealing ring



- **CBL-IDM160-D-J1-U-S18-N0**
- Connecting cable

Connection cable for IDM-Z1-x6x-D-* corded Handheld Readers, Connection cable for corded IDM-Z1-x6x-D-* 1-D and 2-D handheld Barcode Readers for easy connectivity of Pepperl+Fuchs VisuNet devices, Approved for Zone 1 + 21 (ATEX + IECEx), Compatible to DATL-IDM-DB-S-XX00-N0 (M12 female connector), M12 male connector to RJ50 connector with additional sealing ring



- **CBL-IDMx60-D-J1-S-S18-N0**
- Connecting cable

Connection cable for IDM-Zx-x6x-D-* corded Handheld Readers, Connection cable for corded IDM-Zx-x6x-D-* 1-D and 2-D handheld Barcode Readers for easy connectivity of Pepperl+Fuchs VisuNet devices, Approved for Zone 1/21 and Zone 2/22 (ATEX + IECEx), Compatible to DATL-IDM-DB-S-XX00-N0 (M12 female connector), M12 male connector to RJ50 connector with additional sealing ring



- **CBL-IDMx61-B-J1-S-C38-N0**
- Serial connection cable for base station

Accessory cable for IDM-Zx-x6x-M-* Bluetooth® handheld readers, Serial connection cable for base station, Protocol: serial, Compatible with IDM-Zx-x6x-B-* base station, Suitable for Zone 1/21 & Zone 2/22, RJ50 (cradle) to M12 male connector



- **CBL-IDMx61-B-J1-S-S18-N0**
- Serial connection cable for base station

Accessory cable for IDM-Zx-x6x-M-* Bluetooth® handheld readers, Serial connection cable for base station, Protocol: serial, Compatible with IDM-Zx-x6x-B-* base station, Suitable for Zone 1/21 & Zone 2/22, RJ50 (cradle) to M12 male connector



- **CBL-IDMx61-B-J1-U-C38-N0**
- USB connection cable for base station

Accessory cable for IDM-Zx-x6x-M-* Bluetooth® handheld readers, USB connection cable for base station, Protocol: USB, Compatible with IDM-Zx-x6x-B-* base station, Suitable for Zone 1/21 & Zone 2/22, RJ50 (cradle) to M12 male connector



- **CBL-IDMx61-B-J1-U-S18-N0**
- USB connection cable for base station

Accessory cable for IDM-Zx-x6x-M-* Bluetooth® handheld readers, USB connection cable for base station, Protocol: USB, Compatible with IDM-Zx-x6x-B-* base station, Suitable for Zone 1/21 & Zone 2/22, RJ50 (cradle) to M12 male connector



- **CBL-IDMx61-B-Jx-S-S07-N0**
- Connection cable for base station

Accessory cable for IDM-Zx-x6x-M-* Bluetooth® handheld readers, Serial connection cable for base station, Protocol: serial, Compatible with IDM-Zx-x6x-B-* base station, Suitable for Zone 1/21 & Zone 2/22, RJ50 (cradle) to M12 male connector



- **CBL-IDMx61-B-Jx-U-S07-N0**
- Connection cable for base station

Accessory cable for IDM-Zx-x6x-M-* Bluetooth® handheld readers, USB connection cable for base station, Protocol: USB, Compatible with IDM-Zx-x6x-B-* base station, Suitable for Zone 1/21 & Zone 2/22, RJ50 (cradle) to M12 male connector



- **CBL-IDMx61-B-N0-S-C38-N0**
- Serial connection cable for base station

Accessory cable for IDM-Zx-x6x-M-* Bluetooth® handheld readers, Serial connection cable for base station, Non-Ex, for use in safe area only, RJ50 (cradle) to SUB-D9 connector, Protocol: serial, Compatible with IDM-Zx-x6x-B-N0*



- **CBL-IDMx61-B-N0-S-S18-N0**
- Serial connection cable for base station

Accessory cable for IDM-Zx-x6x-M-* Bluetooth® handheld readers, Serial connection cable for base station, Non-Ex, for use in safe area only, RJ50 (cradle) to SUB-D9 connector, Protocol: serial, Compatible with IDM-Zx-x6x-B-N0*



- **CBL-IDMx61-B-N0-U-S18-N0**
- USB connection cable for base station
-

Accessory cable for IDM-Zx-x6x-M-* Bluetooth® handheld readers, USB connection cable for base station, Non-Ex, for use in safe area only, RJ50 (cradle) to USB Type A connector, Protocol: USB, Compatible with IDM-Zx-x6x-B-N0*



- [CBL-IDMx6x-DB-J1-S-C30-N0](#)
- Serial extension cable

Serial extension cable for IDM-Zx-* handheld barcode readers, Serial extension cable, Suitable for Zone 1/21 and Zone 2/22 (ATEX & IECEX), M12 female socket to M12 male connector, Protocol: serial



- [CBL-IDMx6x-DB-J1-S-C60-N0](#)
- Serial extension cable

Serial extension cable for IDM-Zx-* handheld barcode readers, Serial extension cable, Suitable for Zone 1/21 and Zone 2/22 (ATEX & IECEX), M12 female socket to M12 male connector, Protocol: serial



- [CBL-IDMx6x-DB-J1-S-S30-N0](#)
- Serial extension cable

Serial extension cable for IDM-Zx-* handheld barcode readers, Serial extension cable, Suitable for Zone 1/21 and Zone 2/22 (ATEX & IECEX), M12 female socket to M12 male connector, Protocol: serial



- [CBL-IDMx6x-DB-J1-S-S60-N0](#)
- Serial extension cable

Serial extension cable for IDM-Zx-* handheld barcode readers, Serial extension cable, Suitable for Zone 1/21 and Zone 2/22 (ATEX & IECEX), M12 female socket to M12 male connector, Protocol: serial



- [HOLDER-BRACKET-AG1-IDMx61-B-N0](#)
- Bracket for 1-D/2-D code handheld readers for VisuNet GXP 19"

Stainless steel bracket to mount IDM-Zx-x6x-B-Jx-BT-N0 base station to AG1 housing, Mounting bracket, Simple and fast mounting, Compatible with AG1 housing (adapter included), Compatible with 1-D/2-D code handheld reader base stations and chargers



- **IDM-Z2-x61-C-N0-BT-N0**
- Charging station for IDM-Z2-* (Non-hazardous areas)

Charging station for IDM-Z2-* without Bluetooth® functionality (Non-hazardous area), Charging station for IDM-Z2-x61-M-* Bluetooth handheld readers, For use in non-hazardous area only



- **IDM-Z2-x64-B-J2-BT-N0**
- Base station for IDM-Z2-* (Zone 2/22)

Base station for IDM-Z2-* (Zone 2/22), Base/charging station for IDM-Z2-x61-M-* Bluetooth® handheld readers, Certified for ATEX and IECEx Zone 2/22, Bluetooth interface



- **IDM-Z2-x64-B-N0-BT-N0**
- Base station for IDM-Z2-* (Non-hazardous areas)

Base station for IDM-Z2-* (Non-hazardous areas), Base/charging station for IDM-Z2-x61-M-* Bluetooth® handheld readers, Bluetooth interface



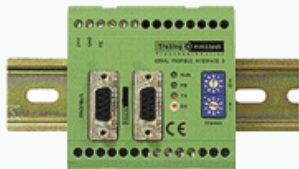
- **SK-IDM-Z2-J2-1M-U-N**
- USB supply cable for corded IDM-Z2-*

Cable barrier for corded IDM-Z2-* handheld readers and base station, Cable-Barrier for corded 1-D and 2-D reader and base station, Enable operation in Zone 2/22, USB Ex ic (via M12 female socket) connection



- **SK-IDM-Z2-J2-5M-S-N**
- Serial supply cable for corded IDM-Z2-*

Cable barrier for corded IDM-Z2-* handheld readers and base station, Cable-Barrier for corded 1-D and 2-D reader and base station, Enable operation in Zone 2/22, Serial RS-232/422 Ex ic (via M12 female socket) connection



- **SK-PROFIBUS-DP-SPI3-HS**
- SK-PROFIBUS SPI3

Profibus-DP gateway, for Siemens only



- **HOLDER-BRACKET-SK-IDM-Z2-N0**
- Accessory for IDM-Z2-*

Bracket for wall mounting of the SK-IDM-Z2-J2-* supply cable, Mounting bracket, Simple and fast mounting



- **IDM-Z1-x60-D-***
- Corded 1-D and 2-D Handheld Reader for Zone 1/21

Corded 1-D and 2-D Handheld Reader for Zone 1/21, Approved for Zone 1 and 21 (ATEX and IECEx), All 1-D standard barcode families supported, 2-D model supports Data Matrix, QR, and other two-dimensional codes, Fall tested from 2 m to ensure reliability



- **IDM-Z1-x61-C-N0-BT-N0**
- Charging station for IDM-Z1-* (Non-hazardous areas)

Charging station for IDM-Z1-* without Bluetooth® functionality (Non-hazardous area), Charging station for IDM-Z1-x61-M-* Bluetooth handheld readers, For use in non-hazardous area only



- **IDM-Z1-x61-M-***
- Bluetooth® 1-D and 2-D Handheld Reader for Zone 1/21

Bluetooth® 1-D and 2-D Handheld Reader for Zone 1/21, Approved for Zone 1 and 21 (ATEX and IECEx), All 1-D standard barcode families supported, 2-D model supports Data Matrix, QR, and other two-dimensional codes, Fall tested from 2 m to ensure reliability



- **IDM-Z1-x64-D-***
- Corded 1-D and 2-D Handheld Reader for Zone 1/21

Corded 1-D and 2-D Handheld Reader for Zone 1/21, Approved for Zone 1 and 21 (ATEX and IECEx), All 1-D standard barcode families supported, 2-D model supports Data Matrix, QR, and other two-dimensional codes, Fall tested from 2 m to ensure reliability



- **IDM-Z1-x64-M-***
- Bluetooth® 1-D and 2-D Handheld Reader for Zone 1/21

Bluetooth® 1-D and 2-D Handheld Reader for Zone 1/21, Approved for Zone 1 and 21 (ATEX and IECEx), All 1-D standard barcode families supported, 2-D model supports Data Matrix, QR, and other two-dimensional codes, Fall tested from 2 m to ensure reliability



- **IDM-Z2-x60-D-***
- Corded 1-D and 2-D Handheld Reader for Zone 2/22

Corded 1-D and 2-D Handheld Reader for Zone 2/22, Approved for Zone 2 and 22 (ATEX and IECEx), All 1-D standard barcode families supported, 2-D model supports Data Matrix, QR, and other two-dimensional codes, Fall tested from 2 m to ensure reliability



- **IDM-Z2-x61-M-***
- Bluetooth® 1-D and 2-D Handheld Reader for Zone 2/22

Bluetooth® 1-D and 2-D Handheld Reader for Zone 2/22, Approved for Zone 2 and 22 (ATEX and IECEx), All 1-D standard barcode families supported, 2-D model supports Data Matrix, QR, and other two-dimensional codes, Fall tested from 2 m to ensure reliability



- **IDM-Z2-x64-D-***
- Corded 1-D and 2-D Handheld Reader for Zone 2/22
-

Corded 1-D and 2-D Handheld Reader for Zone 2/22, Approved for Zone 2 and 22 (ATEX and IECEx), All 1-D standard barcode families supported, 2-D model supports Data Matrix, QR, and other two-dimensional codes, Fall tested from 2 m to ensure reliability



- **IDM-Z2-x64-M-***
- Bluetooth® 1-D and 2-D Handheld Reader for Zone 2/22

Bluetooth® 1-D and 2-D Handheld Reader for Zone 2/22, Approved for Zone 2 and 22 (ATEX and IECEx), All 1-D standard barcode families supported, 2-D model supports Data Matrix, QR, and other two-dimensional codes, Fall tested from 2 m to ensure reliability



- **SK-IDM-Z1-x60-***
- Supply module for IDM-Z1-*

Power supply for IDM-Z1-* handheld readers and base station, AC and DC power supplies for IDM-Z1-* handheld readers and base station, Enable operation in Zone 1/21, Sturdy aluminum housing



Ex i keyboard with optical trackball EXTA4-* -K8* (2020 Generation)

- Degree of protection: IP 65
- Stainless steel housing
- National layout variants available for US, GER and FR
- PC-compatible-keyboard with 105 short stroke keys
- Designed for use in Zone 1/21 and Zone 2/22 hazardous areas
- USB or PS/2 interface with USB cable
- UL listed for USA and Canada, Class I, Div. 2 (UL HazLoc Equipment) or Class I, II, III, Div. 2 (UL Hazloc Component)

Ex i keyboard with optical trackball

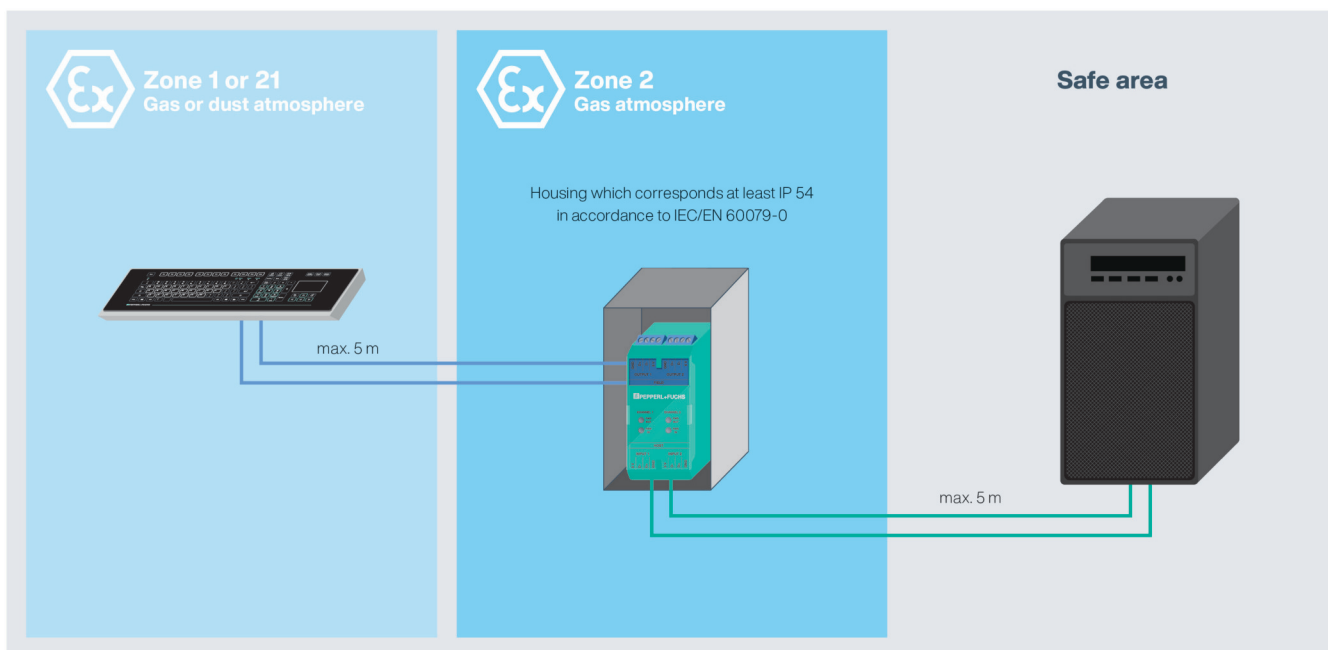


Function

EXTA4-* is an intrinsically safe keyboard with touchpad (EXTA4-* -K4*), joystick (EXTA4-* -K6*) or optical trackball (EXTA4-* -K8*). The interfaces of mouse and keyboard are separated IS-Circuits. Both circuits are lead trough in one connecting cable (connecting cable is included in delivery). The keyboards are designed for panel mounting or for installation in a housing. The EXTA4-* is designed as accessory for the Pepperl+Fuchs Workstations VisuNet GXP and VisuNet FLX but can be used as stand-alone keyboard in combination with the available barriers as well.

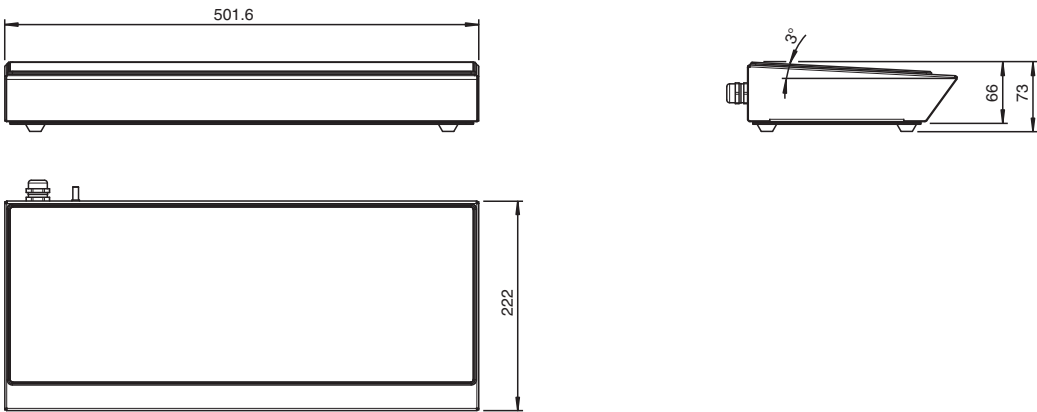
Function Principle

Sample Stand-alone Application for Keyboards (Refer to the manual for further samples.)

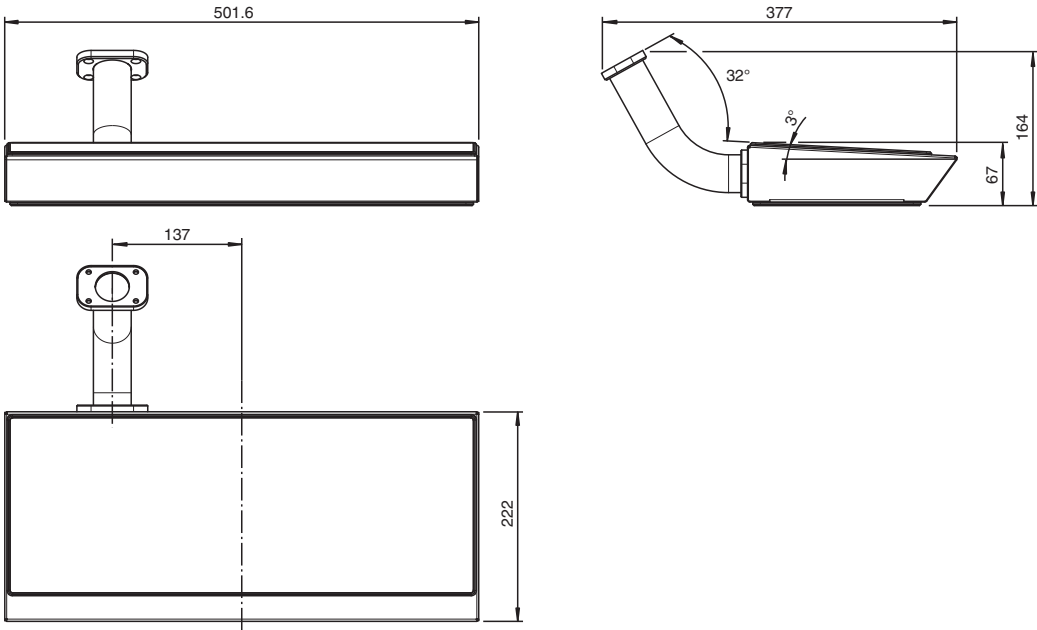


Dimensions

Desktop housing

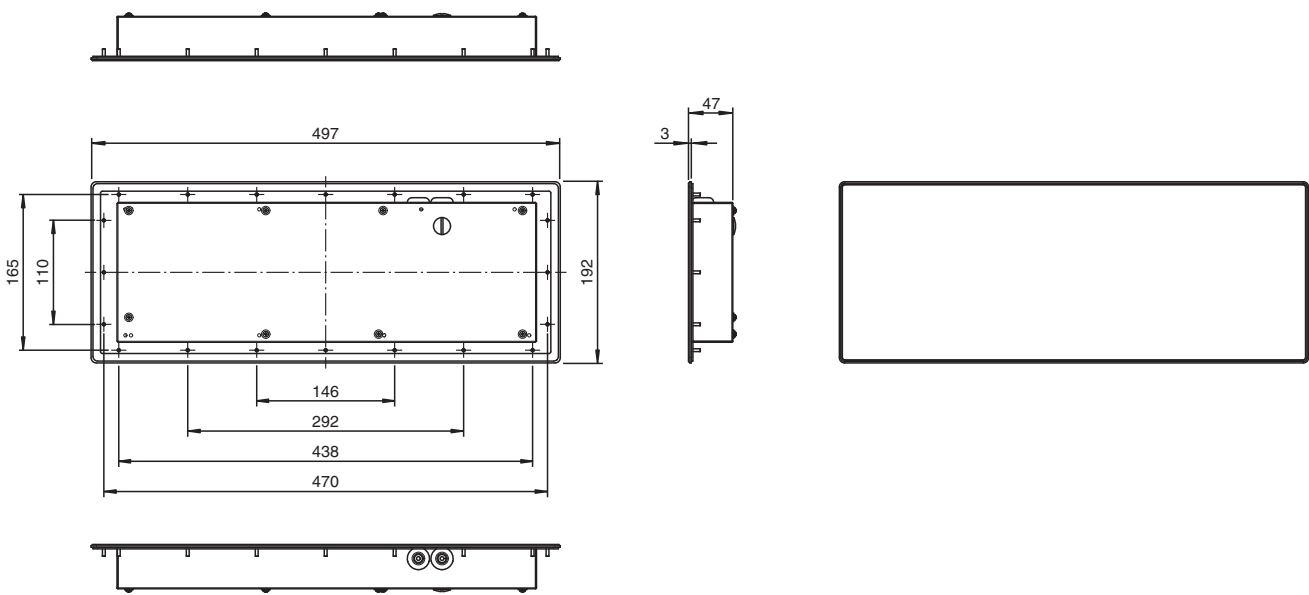


Standard housing with mounting options – sample VisuNet GXP One-Arm Installation



Dimensions

Panel Mounting



Technical Data

General specifications		
Type	Keyboard with optical trackball	
Suitable components		SK-PC-Z1D1-UU1-10-HS and SK-PC-D2-UU1-10-HS
Supply		
Rated voltage	U _r	Ex i, via data line
Indicators/operating means		
Keyboard		105 short stroke keys Keyboard layout: US international, German, French
Trackball		
Diameter		50 mm
Material	Phenolic resin (black)	
Driver		Microsoft Mouse ® , USB
Interface		
Interface type		USB
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU	EN 61326-1:2013 (industrial locations) EN 61000-6-4:2007+A1:2011	
RoHS		
Directive 2011/65/EU (RoHS)	EN 50581:2012-09	
Conformity		
Degree of protection	IP65 in full operation (dynamic)	
Ambient conditions		
Ambient temperature	0 ... 50 °C (32 ... 122 °F)	
Storage temperature		-20 ... 70 °C (-4 ... 158 °F)
Relative humidity	max. 85 % , non-condensing	
Mechanical specifications		
Material	anodized aluminum , Polyester foil	
Mass		1.2 kg (without housing)
Dimensions	502 mm x 222 mm x 66 mm	

Technical Data

Cut out dimensions	450 mm x 152 mm
Cable length	5 m / 1.8 m / 1 m
Data for application in connection with hazardous areas	
EU-type examination certificate	Zone 1/21 BVS 07 ATEX E 163 X
	Zone 2/22 BVS 21 ATEX E 009 X
Marking	Zone 1/21 Ⓔ II 2G Ex ib IIC T4 Gb Ⓔ II 2D Ex ib IIIB T135°C Db
	Zone 2/22 Ⓔ II 3G Ex ic IIC T4 Gc Ⓔ II 3D Ex ic IIIB T135°C Dc
Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0:2018 EN 60079-11:2012
International approvals	
UL approval	
Approved for	EXTA4-* -Fx-K8; EXTA4-* -Tx-K8 (Equipment) Class I, Div 2; Gr A, B, C, D; T5 Class I, Zone 2, Grp IIC; T5
	EXTA4-* -Nx-K8 (Component) Class I Div 2, Gr A, B, C, D; T5 Class II, Div 2; Gr F, G; T5 Class III
	Class I, Zone 2; Gr IIC; T5 Class II, Zone 22; Gr IIIB; T85°C Class III, Zone 22; Gr IIIA; T85°C
IECEx approval	
IECEx certificate	Zone 1/21 IECEx BVS 08.0022X
	Zone 2/22 IECEx BVS 08.0022X
IECEx marking	Zone 1/21 Ex ib IIC T4 Gb Ex ib IIIB T135°C Db
	Zone 2/22 Ex ic IIC T4 Gc Ex ic IIIB T135°C Dc

Type Code

EXTA4-*

EXTA4-	(1)-	(2)-	K(3)	(4)-	U(5)	(6)-	(7)-	(8)
Model								
EXTA4-	Short travel foil keyboard for use in explosion hazardous environments - standard option							
(1)-	Ex Protection							
N-	Industrial, general purpose (non-ex)							
J-	ATEX & IECEx Zone 1/21							
L-	ATEX & IECEx Zone 2/22 and Class I/II, Division 2							
(2)-	Housings							
NN-	No housing, panel mounting							
F1-	Standard housing with mounting options							
T1-	Desktop housing							
K(3)	Mouse Options							
K4	Capacitive Touchpad							
K6	Joystick [Class I, Div. 2 only for "F1" and "T1" housing]							
K8	Optical Trackball							
(4)-	Keyboard Layouts							
US0-	US-International Layout (QWERTY)							

Type Code

(4)-	Keyboard Layouts
DE0-	German Layout (QWERTZ)
FR0-	French Layout (AZERTY)
xxx-	Other languages on request [place holder option for other languages]

U(5)	Cable Length
U10	1 m cable length (preferred for GXP and FLX) [only for housing options "NN" and "F1", not for "T1"]
U18	1.8 m cable length (preferred option for AG1 housing)
U50	5 m cable length (preferred for Desktop housing option) [only for housing options "NN" and "T1", not for "F1"]

(6)-	Connectors
CF-	Cable ends with crimped ferrules (e.g. to connect to VisuNet GXP or Barrier) - standard option
UA-	2x USB type A male connectors (e.g. to connect to VisuNet FLX) - standard option

(7)-	Mounting Options
NP-	Panel mounting [only for housing option "NN"]
T1-	No mounting option - Desktop housing [only for housing options "T1" AND cable length "U18" or "U50"]
G1-	GXP One-Arm installation to AG-XX00 - standard option [only for housing option "F1" AND cable length "U10" AND connector "CF"]
G2-	GXP Double-Arm installation to AG1 - standard option [only for housing option "F1" AND cable length "U18" AND connector "CF"]
H1-	Hinged version for VisuNet FLX - standard option [only for housing option "F1" AND cable length "U10" AND connector "UA"]
C1-	Cabinet / horizontal installation on vertical housing (wall mounting) - standard option [only for housing option "F1" AND cable length "U18" AND connector "UA"]

(8)	Options
N0	Standard, no options - standard option [standard option & preferred]
UV	UV-resistant front foil for outdoor use

Example:

EXTA4-	N-	NN-	K4	US0-	U10	CF-	NP-	N0
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Additional Information

Chemical resistance of keyboard foil

The keyboard foil is manufactured from a biaxially aligned polyester-based material and therefore has a greater resistance to solvents. The foil is stronger and more durable than other standard foils used on keyboards and front panels, such as polycarbonate and PVC.

The keyboard foil is resistant against the following substances: (Test method: DIN42115)	The foil passed the anti microbial effectiveness tested with: (Test method: AATCC Test method 100)
Alcohols	Staphylococcus aureus (MRSA)
Dilute acids	Escherichia coli 0157
Dilute alkalis	Listeria monocytogenes
Esters	Pseudomonas aeruginosa
Hydrocarbons	Salmonella enteritidis
Ketones	Bacillus cereus
Household cleaning agents	Streptococcus faecalis
	Klebsiella pneumoniae
	Aspergillus niger
	Penicillium purpurogenum
	Phoma violacea
	Saccharmyces cerevisiae



Ex i keyboard with joystick EXTA4-* -K6* (2020 Generation)

- Degree of protection: IP66 (housing), IP65 (front panel)
- Stainless steel housing
- National layout variants available for US, GER and FR
- PC-compatible-keyboard with 105 short stroke keys
- Designed for use in Zone 1/21 and Zone 2/22 hazardous areas
- USB or PS/2 interface with USB cable
- UL listed for USA and Canada, Class I, Div. 2 (UL HazLoc Equipment)

Ex i keyboard with joystick

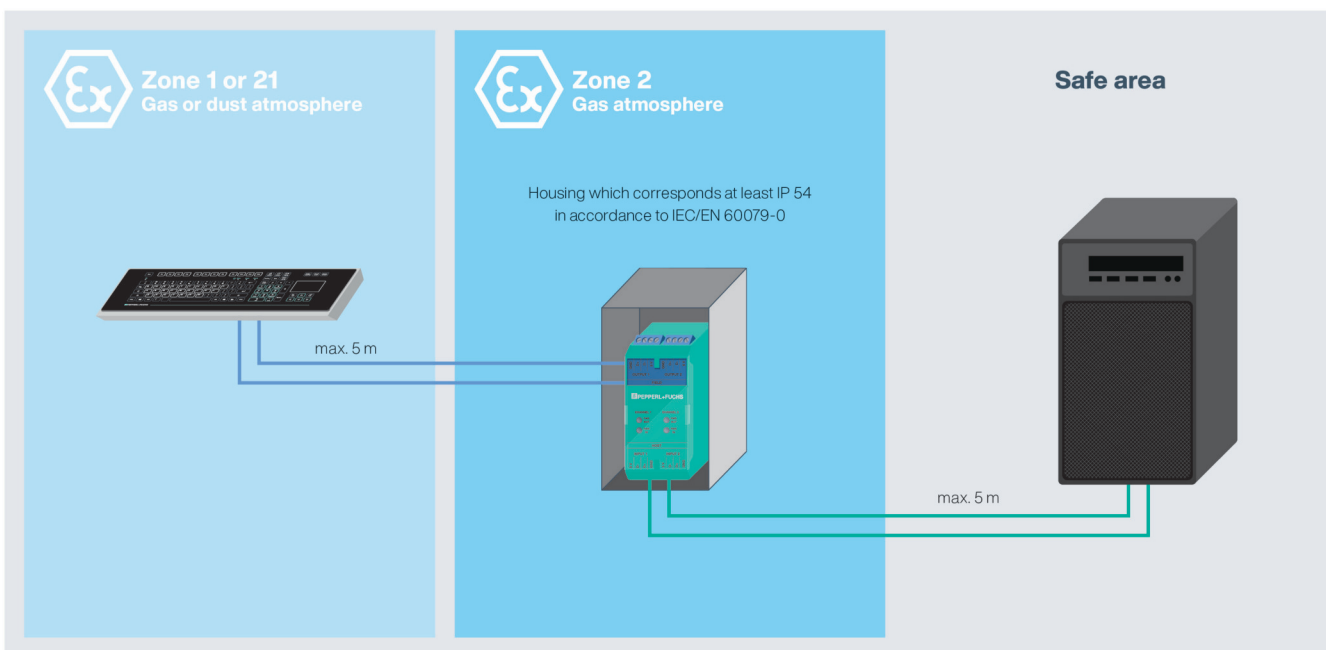


Function

EXTA4-* is an intrinsically safe keyboard with touchpad (EXTA4-* -K4*), joystick (EXTA4-* -K6*) or optical trackball (EXTA4-* -K8*). The interfaces of mouse and keyboard are separated IS-Circuits. Both circuits are lead trough in one connecting cable (connecting cable is included in delivery). The keyboards are designed for panel mounting or for installation in a housing. The EXTA4-* is designed as accessory for the Pepperl+Fuchs Workstations VisuNet GXP and VisuNet FLX but can be used as stand-alone keyboard in combination with the available barriers as well.

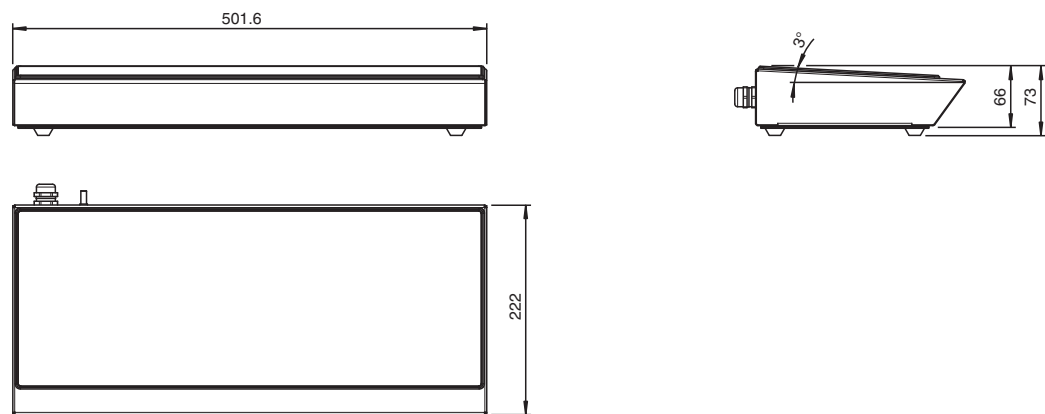
Function Principle

Sample Stand-alone Application for Keyboards (Refer to the manual for further samples.)

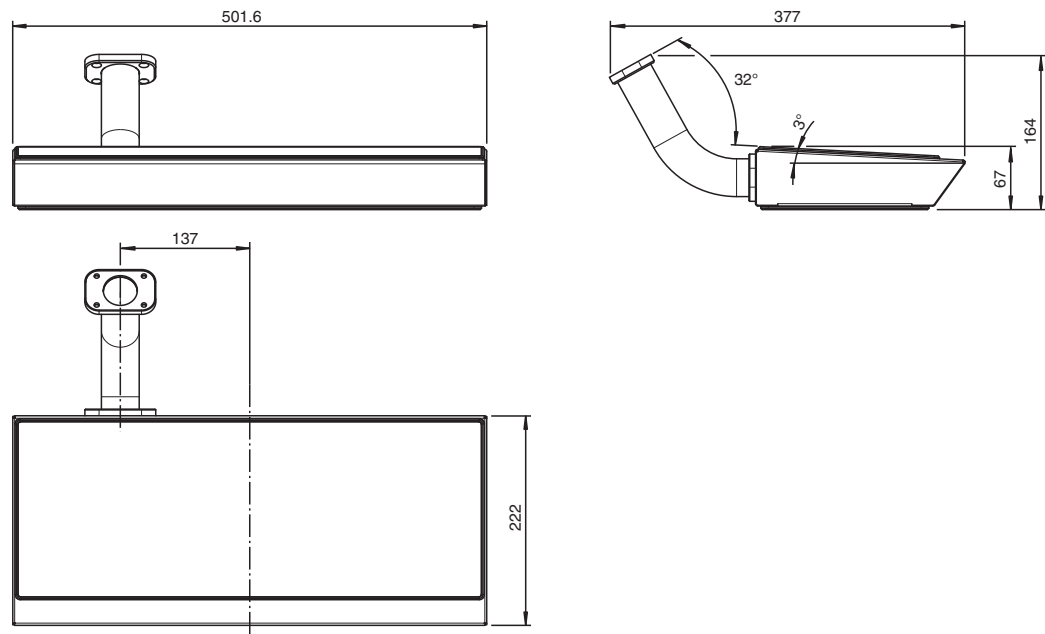


Dimensions

Desktop housing

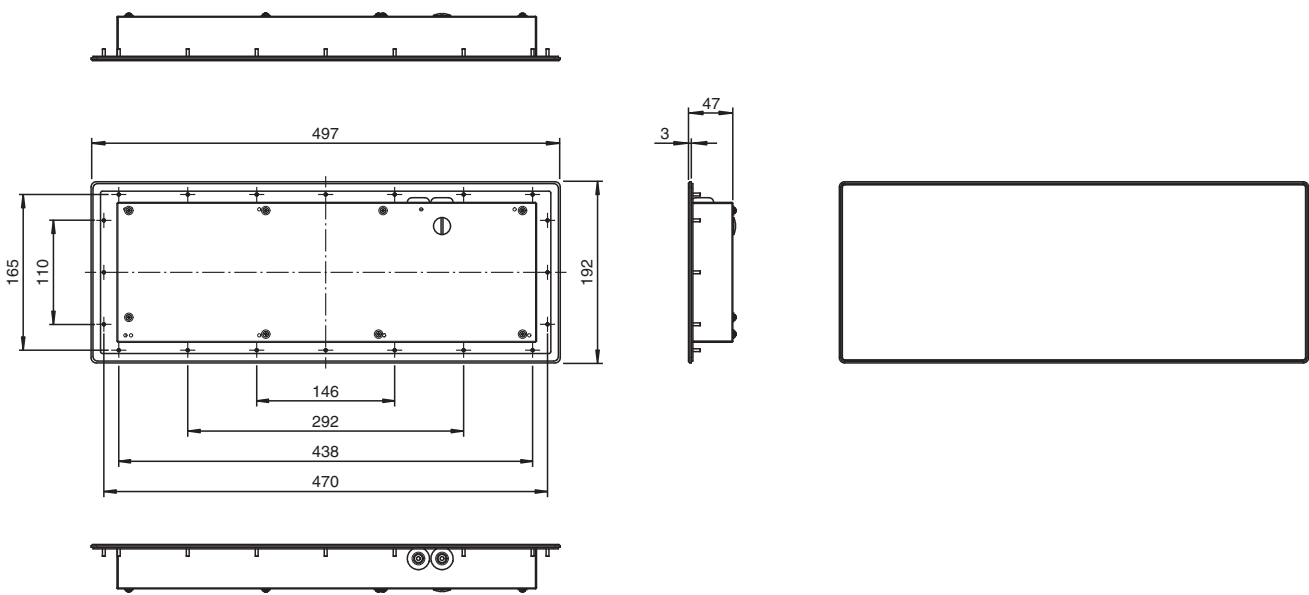


Standard housing with mounting options – sample VisuNet GXP One-Arm Installation



Dimensions

Panel Mounting



Technical Data

General specifications		
Type	Keyboard with joystick	
Suitable components		SK-PC-Z1D1-UU1-10-HS and SK-PC-D2-UU1-10-HS
Supply		
Rated voltage	U _r	Ex i, via data line
Indicators/operating means		
Keyboard		105 short stroke keys Keyboard layout: US international, German, French
Joystick		
Driver		Microsoft Mouse ® , USB
Interface		
Interface type		USB
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU	EN 61326-1:2013 (industrial locations) EN 61000-6-4:2007+A1:2011	
RoHS		
Directive 2011/65/EU (RoHS)	EN 50581:2012-09	
Conformity		
Degree of protection	IP65	
Ambient conditions		
Ambient temperature	-20 ... 50 °C (-4 ... 122 °F)	
Storage temperature		-20 ... 70 °C (-4 ... 158 °F)
Relative humidity	max. 85 % , non-condensing	
Mechanical specifications		
Material	anodized aluminum , Polyester foil	
Mass		1.2 kg (without housing)
Dimensions	502 mm x 222 mm x 66 mm	
Cut out dimensions		450 mm x 152 mm
Cable length	5 m / 1.8 m / 1 m	

Technical Data

Data for application in connection with hazardous areas

EU-type examination certificate		Zone 1/21 BVS 07 ATEX E 163 X
		Zone 2/22 BVS 21 ATEX E 009 X
Marking		Zone 1/21 Ⓜ II 2G Ex ib IIC T4 Gb Ⓜ II 2D Ex ib IIIB T135°C Db Zone 2/22 Ⓜ II 3G Ex ic IIC T4 Gc Ⓜ II 3D Ex ic IIIB T135°C Dc
Directive conformity		
Directive 2014/34/EU		EN IEC 60079-0:2018 EN 60079-11:2012
International approvals		
UL approval		
Approved for		EXTA4-*-Fx-K6; EXTA4-*-Tx-K6 (Equipment) Class I, Div 2; Gr A, B, C, D: T5 Class I, Zone 2, Grp IIC; T5
IECEx approval		
IECEx certificate		Zone 1/21 IECEx BVS 08.0022X Zone 2/22 IECEx BVS 08.0022X
IECEx marking		Zone 1/21 Ex ib IIC T4 Gb Ex ib IIIB T135°C Db Zone 2/22 Ex ic IIC T4 Gc Ex ic IIIB T135°C Dc

Type Code

EXTA4-*

EXTA4-	(1)-	(2)-	K(3)	(4)-	U(5)	(6)-	(7)-	(8)
--------	------	------	------	------	------	------	------	-----

Model

EXTA4-	Short travel foil keyboard for use in explosion hazardous environments - standard option
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(1)- Ex Protection

N-	Industrial, general purpose (non-ex)
J-	ATEX & IECEx Zone 1/21
L-	ATEX & IECEx Zone 2/22 and Class I/II, Division 2

(2)- Housings

NN-	No housing, panel mounting
F1-	Standard housing with mounting options
T1-	Desktop housing

K(3) Mouse Options

K4	Capacitive Touchpad
K6	Joystick [Class I, Div. 2 only for "F1" and "T1" housing]
K8	Optical Trackball

(4)- Keyboard Layouts

US0-	US-International Layout (QWERTY)
DE0-	German Layout (QWERTZ)
FR0-	French Layout (AZERTY)
xxx-	Other languages on request [place holder option for other languages]

U(5) Cable Length

U10	1 m cable length (preferred for GXP and FLX) [only for housing options "NN" and "F1", not for "T1"]
U18	1.8 m cable length (preferred option for AG1 housing)
U50	5 m cable length (preferred for Desktop housing option) [only for housing options "NN" and "T1", not for "F1"]

Type Code

(6)-	Connectors
CF-	Cable ends with crimped ferrules (e.g. to connect to VisuNet GXP or Barrier) - standard option
UA-	2x USB type A male connectors (e.g. to connect to VisuNet FLX) - standard option

(7)-	Mounting Options
NP-	Panel mounting [only for housing option "NN"]
T1-	No mounting option - Desktop housing [only for housing options "T1" AND cable length "U18" or "U50"]
G1-	GXP One-Arm installation to AG-XX00 - standard option [only for housing option "F1" AND cable length "U10" AND connector "CF"]
G2-	GXP Double-Arm installation to AG1 - standard option [only for housing option "F1" AND cable length "U18" AND connector "CF"]
H1-	Hinged version for VisuNet FLX - standard option [only for housing option "F1" AND cable length "U10" AND connector "UA"]
C1-	Cabinet / horizontal installation on vertical housing (wall mounting) - standard option [only for housing option "F1" AND cable length "U18" AND connector "UA"]

(8)	Options
N0	Standard, no options - standard option [standard option & preferred]
UV	UV-resistant front foil for outdoor use

Example:

EXTA4-	N-	NN-	K4	US0-	U10	CF-	NP-	N0
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Additional Information

Chemical resistance of keyboard foil

The keyboard foil is manufactured from a biaxially aligned polyester-based material and therefore has a greater resistance to solvents. The foil is stronger and more durable than other standard foils used on keyboards and front panels, such as polycarbonate and PVC.

The keyboard foil is resistant against the following substances: (Test method: DIN42115)	The foil passed the anti microbial effectiveness tested with: (Test method: AATCC Test method 100)
Alcohols	Staphylococcus aureus (MRSA)
Dilute acids	Escherichia coli 0157
Dilute alkalis	Listeria monocytogenes
Esters	Pseudomonas aeruginosa
Hydrocarbons	Salmonella enteritidis
Ketones	Bacillus cereus
Household cleaning agents	Streptococcus faecalis
	Klebsiella pneumoniae
	Aspergillus niger
	Penicillium purpurogenum
	Phoma violacea
	Saccharmyces cerevisiae

Ex i keyboard with touch pad EXTA4-* -K4* (2020 Generation)



- Degree of protection: IP66
- Stainless steel housing
- National layout variants available for US, GER and FR
- PC-compatible-keyboard with 105 short stroke keys
- Designed for use in Zone 1/21 and Zone 2/22 hazardous areas
- USB or PS/2 interface with USB cable
- UL listed for USA and Canada, Class I, Div. 2 (UL HazLoc Equipment) or Class I, II, III, Div. 2 (UL Hazloc Component)

Ex i keyboard with touch pad

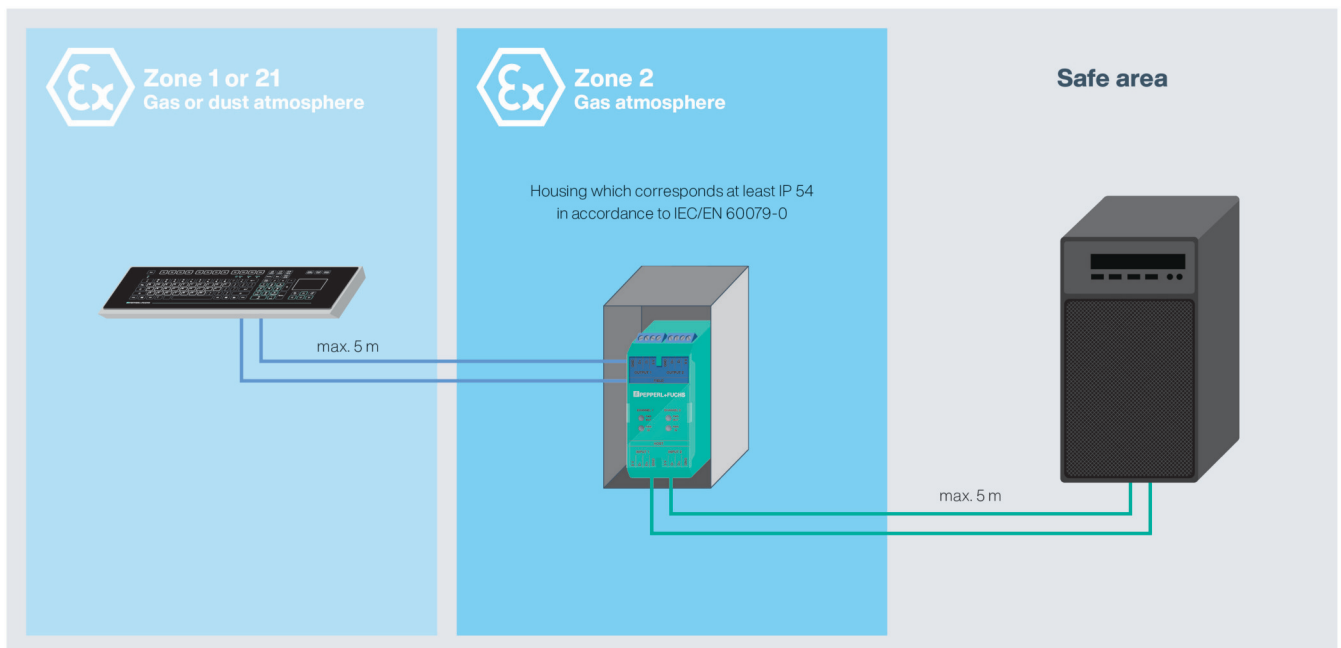


Function

EXTA4-* is an intrinsically safe keyboard with touchpad (EXTA4-* -K4*), joystick (EXTA4-* -K6*) or optical trackball (EXTA4-* -K8*). The interfaces of mouse and keyboard are separated IS-Circuits. Both circuits are lead trough in one connecting cable (connecting cable is included in delivery). The keyboards are designed for panel mounting or for installation in a housing.
The EXTA4-* is designed as accessory for the Pepperl+Fuchs Workstations VisuNet GXP and VisuNet FLX but can be used as stand-alone keyboard in combination with the available barriers as well.

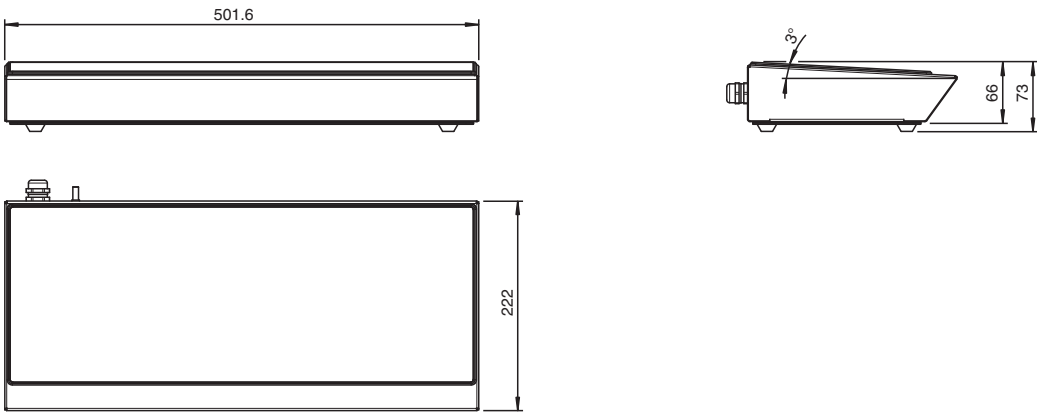
Function Principle

Sample Stand-alone Application for Keyboards (Refer to the manual for further samples.)

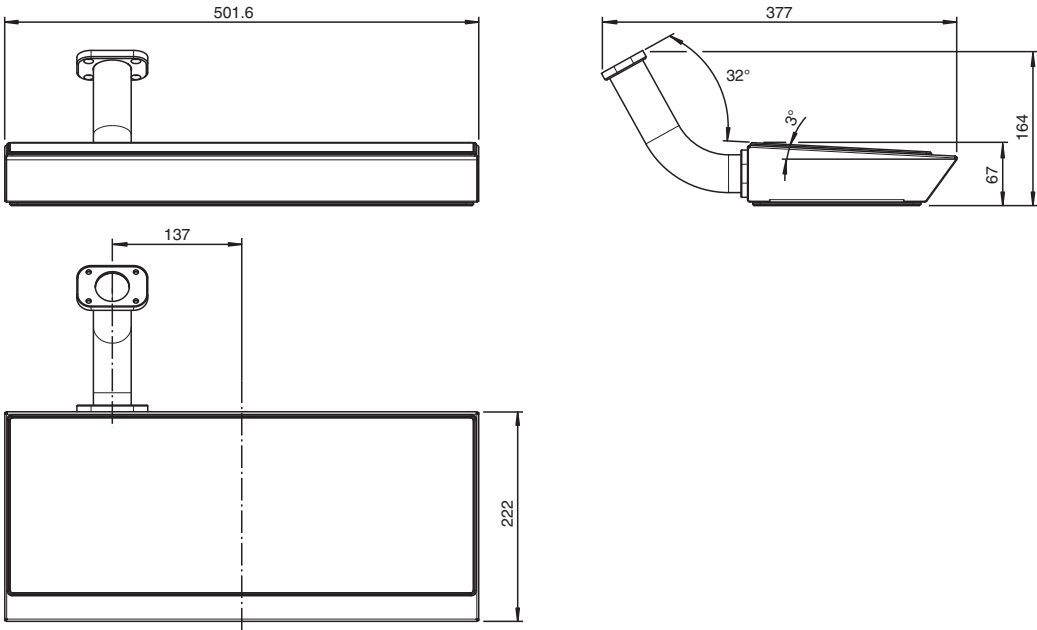


Dimensions

Desktop housing

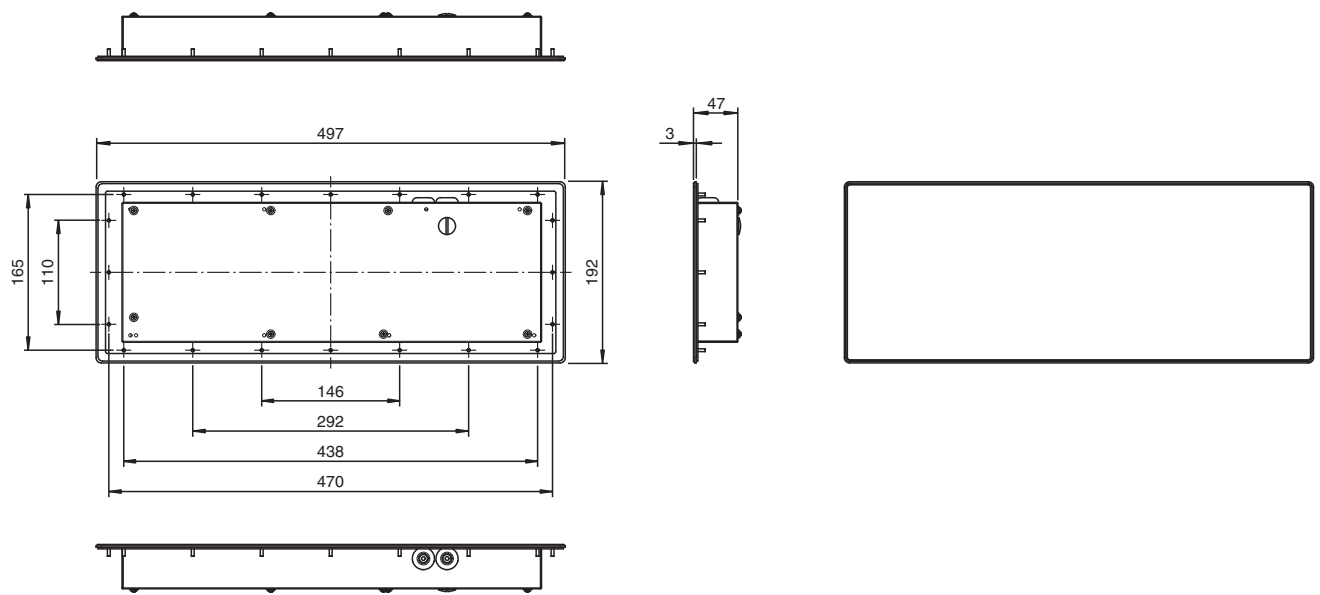


Standard housing with mounting options – sample VisuNet GXP One-Arm Installation



Dimensions

Panel Mounting



Technical Data

General specifications

Type	Keyboard with touch pad
Suitable components	SK-PC-Z1D1-UU1-10-HS and SK-PC-D2-UU1-10-HS

Supply

Rated voltage	U_r	Ex i, via data line
---------------	-------	---------------------

Indicators/operating means

Keyboard	105 short stroke keys Keyboard layout: US international, German, French
----------	--

Touchpad	
Active Principle	Capacitive
Resolution	40 Pts./mm
Dimensions	66 x 50
Driver	Microsoft Mouse ® , USB

Interface

Interface type	USB
----------------	-----

Directive conformity

Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013 (industrial locations) EN 61000-6-4:2007+A1:2011

RoHS		
Directive 2011/65/EU (RoHS)		EN 50581:2012-09

Conformity

Degree of protection	IP66
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Ambient conditions

Ambient temperature	-20 ... 50 °C (-4 ... 122 °F)
Storage temperature	-20 ... 70 °C (-4 ... 158 °F)
Relative humidity	max. 85 % , non-condensing

Mechanical specifications

Material	anodized aluminum , Polyester foil
Mass	1.2 kg (without housing)

Technical Data

Dimensions	502 mm x 222 mm x 66 mm
Cut out dimensions	450 mm x 152 mm
Cable length	5 m / 1.8 m / 1 m
Data for application in connection with hazardous areas	
EU-type examination certificate	Zone 1/21 BVS 07 ATEX E 163 X Zone 2/22 BVS 21 ATEX E 009 X
Marking	Zone 1/21 Ⓔ II 2G Ex ib IIC T4 Gb Ⓔ II 2D Ex ib IIIB T135°C Db Zone 2/22 Ⓔ II 3G Ex ic IIC T4 Gc Ⓔ II 3D Ex ic IIIB T135°C Dc
Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0:2018 EN 60079-11:2012
International approvals	
UL approval	
Approved for	EXTA4-* -Fx-K4; EXTA4-* -Tx-K4 (Equipment) Class I, Div 2; Gr A, B, C, D; T5 Class I, Zone 2, Grp IIC; T5 EXTA4-* -Nx-K4 (Component) Class I Div 2, Gr A, B, C, D; T5 Class II, Div 2; Gr F, G; T5 Class III Class I, Zone 2; Gr IIC; T5 Class II, Zone 22; Gr IIIB; T85°C Class III, Zone 22; Gr IIIA; T85°C
IECEx approval	
IECEx certificate	Zone 1/21 IECEx BVS 08.0022X Zone 2/22 IECEx BVS 08.0022X
IECEx marking	Zone 1/21 Ex ib IIC T4 Gb Ex ib IIIB T135°C Db Zone 2/22 Ex ic IIC T4 Gc Ex ic IIIB T135°C Dc

Type Code

EXTA4-*

EXTA4-	(1)-	(2)-	K(3)	(4)-	U(5)	(6)-	(7)-	(8)
Model								
EXTA4-	Short travel foil keyboard for use in explosion hazardous environments - standard option							
(1)-	Ex Protection							
N-	Industrial, general purpose (non-ex)							
J-	ATEX & IECEx Zone 1/21							
L-	ATEX & IECEx Zone 2/22 and Class I/II, Division 2							
(2)-	Housings							
NN-	No housing, panel mounting							
F1-	Standard housing with mounting options							
T1-	Desktop housing							
K(3)	Mouse Options							
K4	Capacitive Touchpad							
K6	Joystick [Class I, Div. 2 only for "F1" and "T1" housing]							
K8	Optical Trackball							

Type Code

(4)-	Keyboard Layouts
US0-	US-International Layout (QWERTY)
DE0-	German Layout (QWERTZ)
FR0-	French Layout (AZERTY)
xxx-	Other languages on request [place holder option for other languages]

U(5)	Cable Length
U10	1 m cable length (preferred for GXP and FLX) [only for housing options "NN" and "F1", not for "T1"]
U18	1.8 m cable length (preferred option for AG1 housing)
U50	5 m cable length (preferred for Desktop housing option) [only for housing options "NN" and "T1", not for "F1"]

(6)-	Connectors
CF-	Cable ends with crimped ferrules (e.g. to connect to VisuNet GXP or Barrier) - standard option
UA-	2x USB type A male connectors (e.g. to connect to VisuNet FLX) - standard option

(7)-	Mounting Options
NP-	Panel mounting [only for housing option "NN"]
T1-	No mounting option - Desktop housing [only for housing options "T1" AND cable length "U18" or "U50"]
G1-	GXP One-Arm installation to AG-XX00 - standard option [only for housing option "F1" AND cable length "U10" AND connector "CF"]
G2-	GXP Double-Arm installation to AG1 - standard option [only for housing option "F1" AND cable length "U18" AND connector "CF"]
H1-	Hinged version for VisuNet FLX - standard option [only for housing option "F1" AND cable length "U10" AND connector "UA"]
C1-	Cabinet / horizontal installation on vertical housing (wall mounting) - standard option [only for housing option "F1" AND cable length "U18" AND connector "UA"]

(8)	Options
N0	Standard, no options - standard option [standard option & preferred]
UV	UV-resistant front foil for outdoor use

Example:

EXTA4-	N-	NN-	K4	US0-	U10	CF-	NP-	N0
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Additional Information

Chemical resistance of keyboard foil

The keyboard foil is manufactured from a biaxially aligned polyester-based material and therefore has a greater resistance to solvents. The foil is stronger and more durable than other standard foils used on keyboards and front panels, such as polycarbonate and PVC.

The keyboard foil is resistant against the following substances: (Test method: DIN42115)	The foil passed the anti microbial effectiveness tested with: (Test method: AATCC Test method 100)
Alcohols	Staphylococcus aureus (MRSA)
Dilute acids	Escherichia coli 0157
Dilute alkalis	Listeria monocytogenes
Esters	Pseudomonas aeruginosa
Hydrocarbons	Salmonella enteritidis
Ketones	Bacillus cereus
Household cleaning agents	Streptococcus faecalis
	Klebsiella pneumoniae
	Aspergillus niger
	Penicillium purpurogenum
	Phoma violacea
	Saccharmyces cerevisiae

Ex i keyboard with touch pad EXTA4-*1-**-K4* (2024 Generation)



- Degree of protection: IP66
- Stainless steel housing
- National layout variants available for US, GER and FR
- PC-compatible-keyboard with 105 short stroke keys
- Designed for use in Zone 1/21 and Zone 2/22 hazardous areas
- USB interface with USB cable

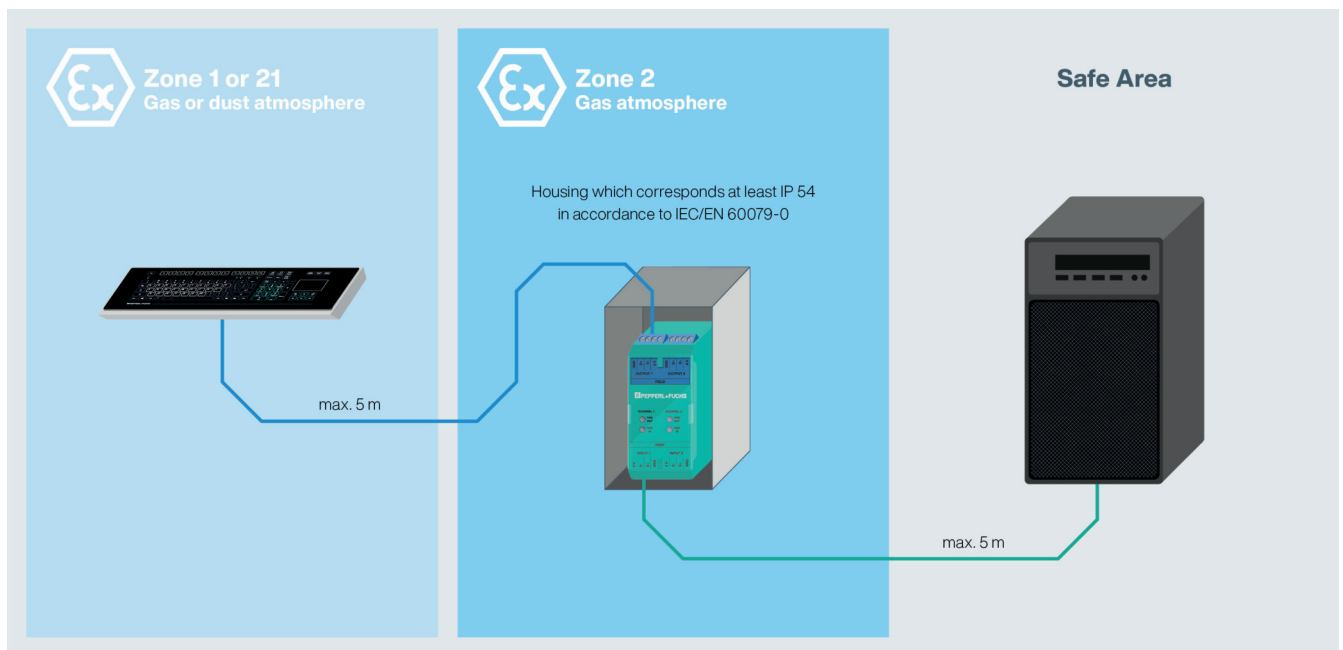
Ex i keyboard with touch pad



Function

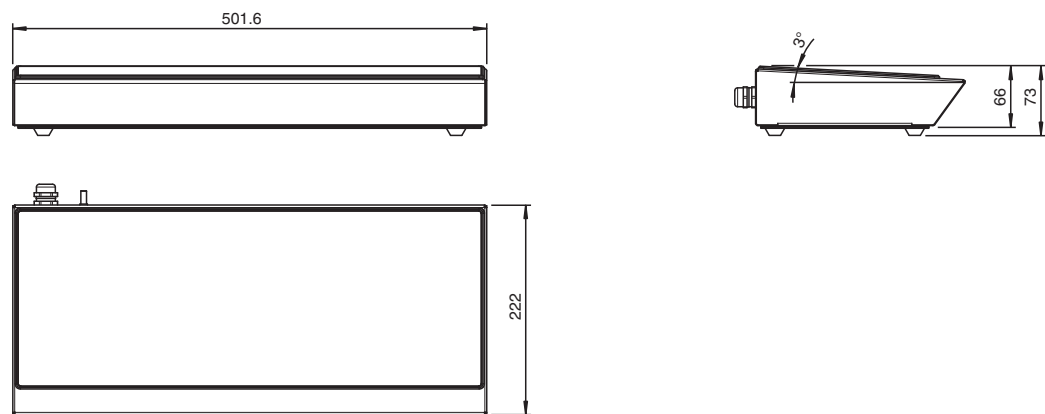
EXTA4-* is an intrinsically safe keyboard with touchpad (EXTA4-*1-**-K4*), joystick (EXTA4-*1-**-K6*) or optical trackball (EXTA4-*1-**-K8*). The interfaces of mouse and keyboard are included in one IS-Circuit. The Circuit is lead trough in one connecting cable (connecting cable is included in delivery). The keyboards are designed for panel mounting or for installation in a housing. The EXTA4-* is designed as accessory for the Pepperl+Fuchs Workstations VisuNet GXP and VisuNet FLX but can be used as stand-alone keyboard in combination with the available barriers as well.

Function Principle

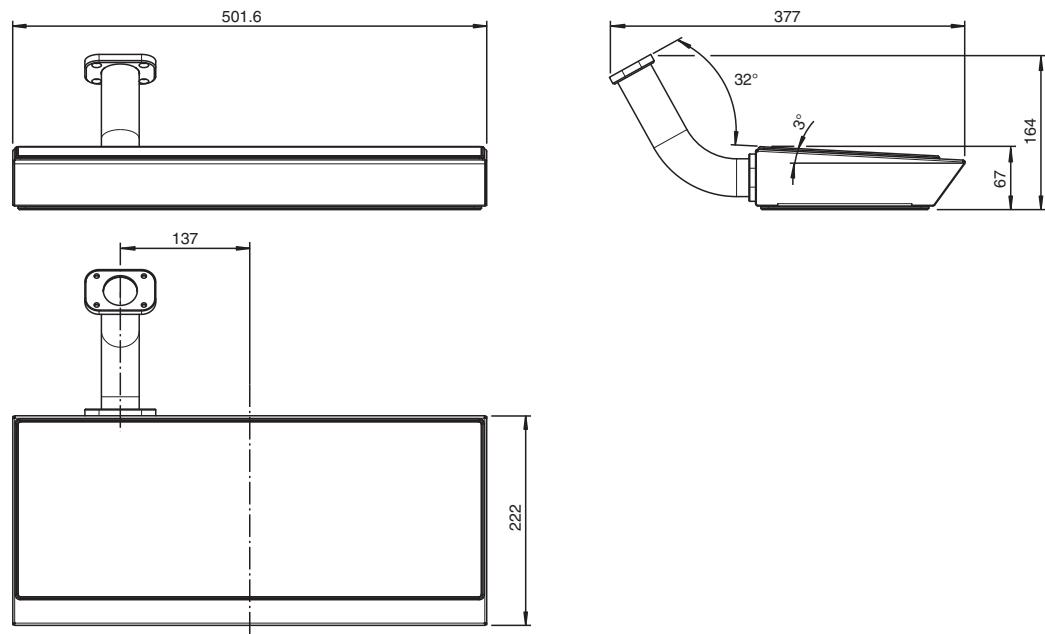


Dimensions

Desktop housing

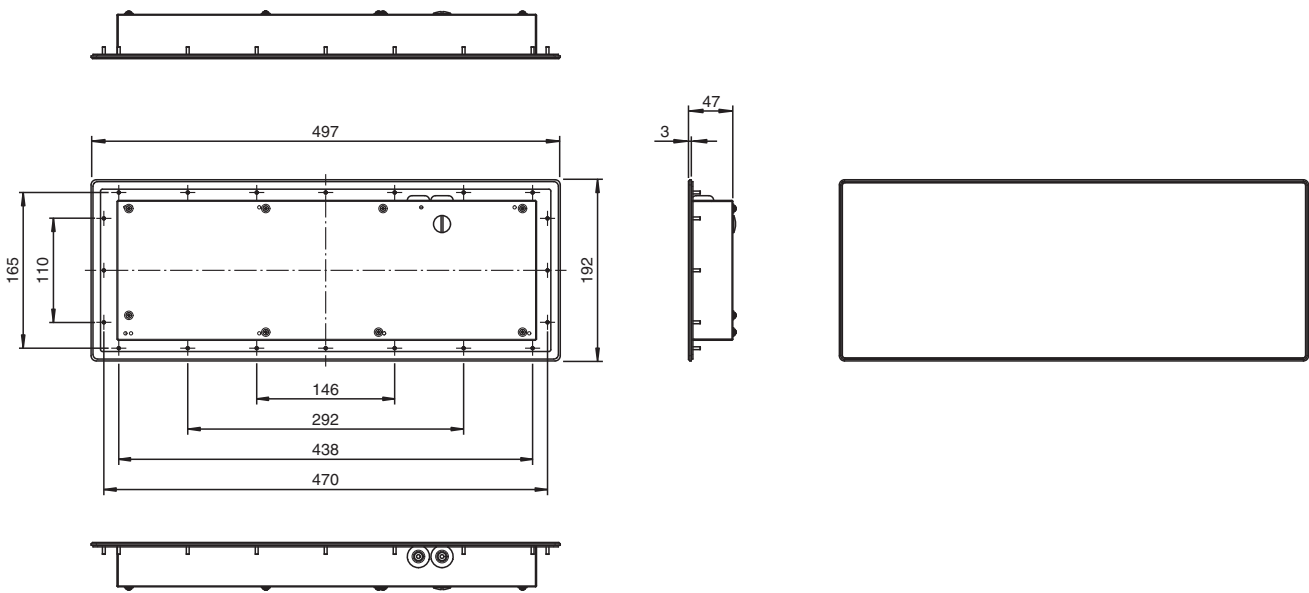


Standard housing with mounting options – sample VisuNet GXP One-Arm Installation



Dimensions

Panel Mounting



Technical Data

General specifications		
Type	Keyboard with touch pad	
Suitable components		SK-PC-Z1D1-UU1-10-HS
Supply		
Rated voltage	U _r	Ex i, via data line
Indicators/operating means		
Keyboard		105 short stroke keys Keyboard layout: US international, German, French
Touchpad		
Active Principle		Capacitive
Resolution	10 Pts/mm x 10 Pts/mm	
Dimensions		66 x 50
Interface		
Interface type		USB
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2021 (Ind loc) EN 61000-6-4:2007+A1:2011 EN 55011:2016+A11:2020 (Class B)
Explosion protection		
Directive 2014/34/EU		EN IEC 60079-0:2018 EN 60079-11:2012
RoHS		
Directive 2011/65/EU (RoHS)		EN IEC 63000:2018-12
Conformity		
Degree of protection		IP66
Ambient conditions		
Ambient temperature		-20 ... 50 °C (-4 ... 122 °F)
Storage temperature		-20 ... 70 °C (-4 ... 158 °F)
Relative humidity		max. 85 % , non-condensing
Mechanical specifications		

Technical Data

Material	anodized aluminum , stainless steel (F1- Mounting Option), Polyester foil	
Mass		1.2 kg (without housing)
Dimensions		502 mm x 222 mm x 66 mm
Cut out dimensions		450 mm x 152 mm
Cable length		5 m / 2 m / 1 m
Data for application in connection with hazardous areas		
EU-type examination certificate		Zone 1/21 BVS 07 ATEX E 163 X
		Zone 2/22 BVS 21 ATEX E 009 X
Marking		Zone 1/21 Ⓜ II 2G Ex ib IIC T4 Gb Ⓜ II 2D Ex ib IIIB T135°C Db
		Zone 2/22 Ⓜ II 3G Ex ic IIC T4 Gc Ⓜ II 3D Ex ic IIIB T135°C Dc
International approvals		
IECEx approval		
IECEx certificate		Zone 1/21 IECEx BVS 08.0022X
		Zone 2/22 IECEx BVS 08.0022X
IECEx marking		Zone 1/21 Ex ib IIC T4 Gb Ex ib IIIB T135°C Db
		Zone 2/22 Ex ic IIC T4 Gc Ex ic IIIB T135°C Dc

Type Code

EXTA4-*

EXTA4-	(1)-	(2)-	K(3)	(4)-	U(5)	(6)-	(7)-	(8)
--------	------	------	------	------	------	------	------	-----

Model	
EXTA4-	Short travel foil keyboard for use in explosion hazardous environments - standard option

(1)-	Explosion protection
N1-	Industrial, general purpose (non-ex)
J1-	ATEX & IECEx Zone 1/21
L1-	ATEX & IECEx Zone 2/22

(2)-	Housings
NN-	No housing, panel mounting
F1-	Standard housing with mounting options
F2-	Pharma housing with mounting options
T1-	Desktop housing

K(3)	Mouse Options
K4	Capacitive touchpad
K6	Joystick
K8	Optical trackball

(4)-	Keyboard Layouts
US0-	US-International Layout (QWERTY)
DE0-	German Layout (QWERTZ)
FR0-	French Layout (AZERTY)
xxx-	Other languages on request [place holder option for other languages]

U(5)	Cable Length
U10	1 m cable length (preferred for GXP and FLX) [only for housing options "NN", "F1" and "F2", not for "T1"]
U20	2 m cable length (preferred option for AG1 housing)
U50	5 m cable length (preferred for Desktop housing option) [only for housing options "NN" and "T1", not for "F1" and "F2"]

Type Code

(6)-	Connectors
C1-	Cable end with crimped ferrules (e.g. to connect to VisuNet GXP or Barrier) - standard option
U1-	USB type A male connector (e.g. to connect to VisuNet FLX) - standard option

(7)-	Mounting Options
NP-	Panel mounting [only for housing option "NN"]
T1-	No mounting option - Desktop housing [only for housing options "T1" AND cable length "U20" or "U50"]
G1-	GXP One-Arm installation to AG-XX00 - standard option [only for housing option "F1" AND cable length "U10" AND connector "C1"]
G2-	GXP Double-Arm installation to AG1 - standard option [only for housing option "F1" AND cable length "U20" AND connector "C1"]
F1-	VisuNet FLX one-arm installation to AG-XX00 [only for housing option "F2" AND cable length "U10" AND connector "U1"]
H1-	Hinged version for VisuNet FLX - standard option [only for housing option "F1" AND cable length "U10" AND connector "U1"]
C1-	Cabinet / horizontal installation on vertical housing (wall mounting) - standard option [only for housing option "F1" AND cable length "U20" AND connector "U1"]

(8)	Options
N0	Standard, no options - standard option [standard option & preferred]
U0	UV-resistant front foil for outdoor use

Example:

EXTA4-	N1-	NN-	K4	US0-	U10	C1-	NP-	N0
--------	-----	-----	----	------	-----	-----	-----	----



Additional Information

Chemical resistance of keyboard foil

The keyboard foil is manufactured from a biaxially aligned polyester-based material and therefore has a greater resistance to solvents. The foil is stronger and more durable than other standard foils used on keyboards and front panels, such as polycarbonate and PVC.

The keyboard foil is resistant against the following substances: (Test methode: DIN42115)	The foil passed the anti microbial effectiveness tested with: (Test method: AATCC Test method 100)
Alcohols	Staphylococcus aureus (MRSA)
Dilute acids	Escherichia coli 0157
Dilute alkalis	Listeria monocytogenes
Esters	Pseudomonas aeruginosa
Hydrocarbons	Salmonella enteritidis
Ketones	Bacillus cereus
Household cleaning agents	Streptococcus faecalis
	Klebsiella pneumoniae
	Aspergillus niger
	Penicillium purpurogenum
	Phoma violacea
	Saccharmyces cerevisiae



Ex i keyboard with joystick EXTA4-*1-**-K6* (2024 Generation)

- Degree of protection: IP66 (housing), IP65 (joystick)
- Stainless steel housing
- National layout variants available for US, GER and FR
- PC-compatible-keyboard with 105 short stroke keys
- Designed for use in Zone 1/21 and Zone 2/22 hazardous areas
- USB interface with USB cable

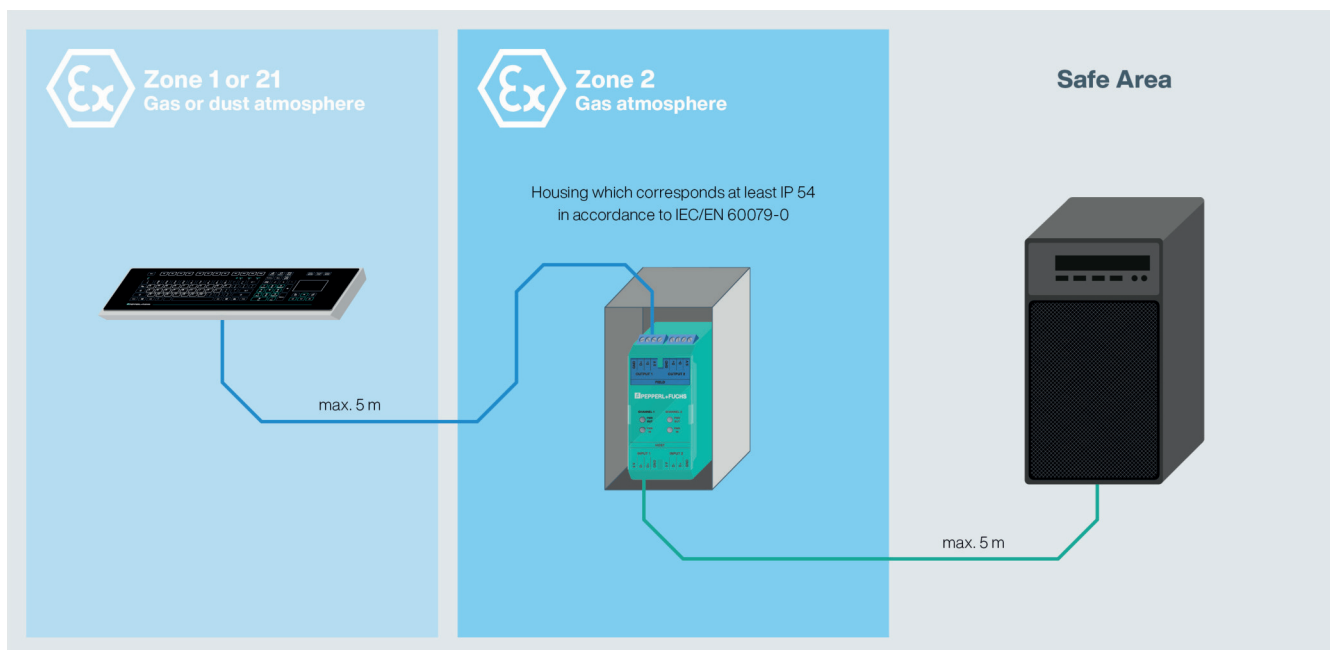
Ex i keyboard with joystick



Function

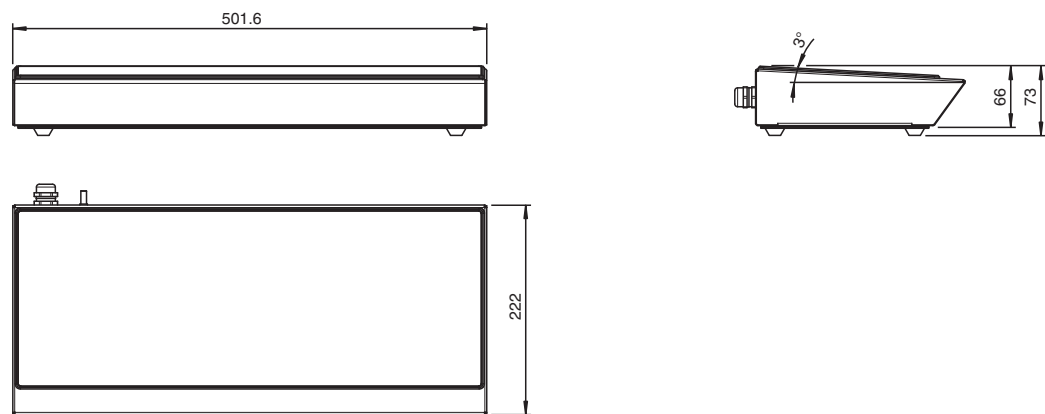
EXTA4-* is an intrinsically safe keyboard with touchpad (EXTA4-*1-**-K4*), joystick (EXTA4-*1-**-K6*) or optical trackball (EXTA4-*1-**-K8*). The interfaces of mouse and keyboard are included in one IS-Circuit. The Circuit is lead trough in one connecting cable (connecting cable is included in delivery). The keyboards are designed for panel mounting or for installation in a housing. The EXTA4-* is designed as accessory for the Pepperl+Fuchs Workstations VisuNet GXP and VisuNet FLX but can be used as stand-alone keyboard in combination with the available barriers as well.

Function Principle

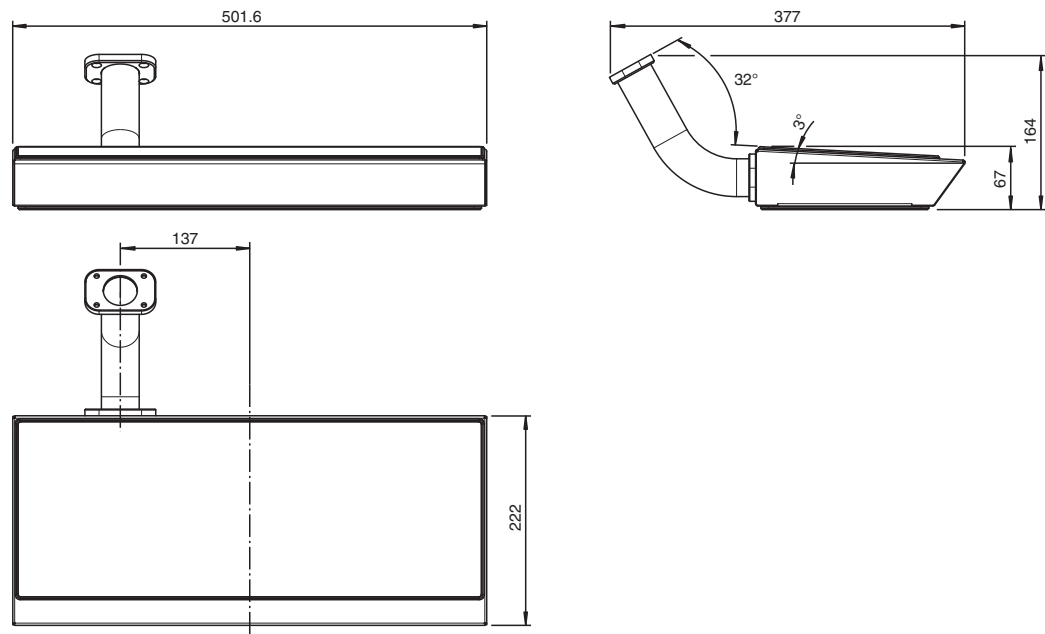


Dimensions

Desktop housing

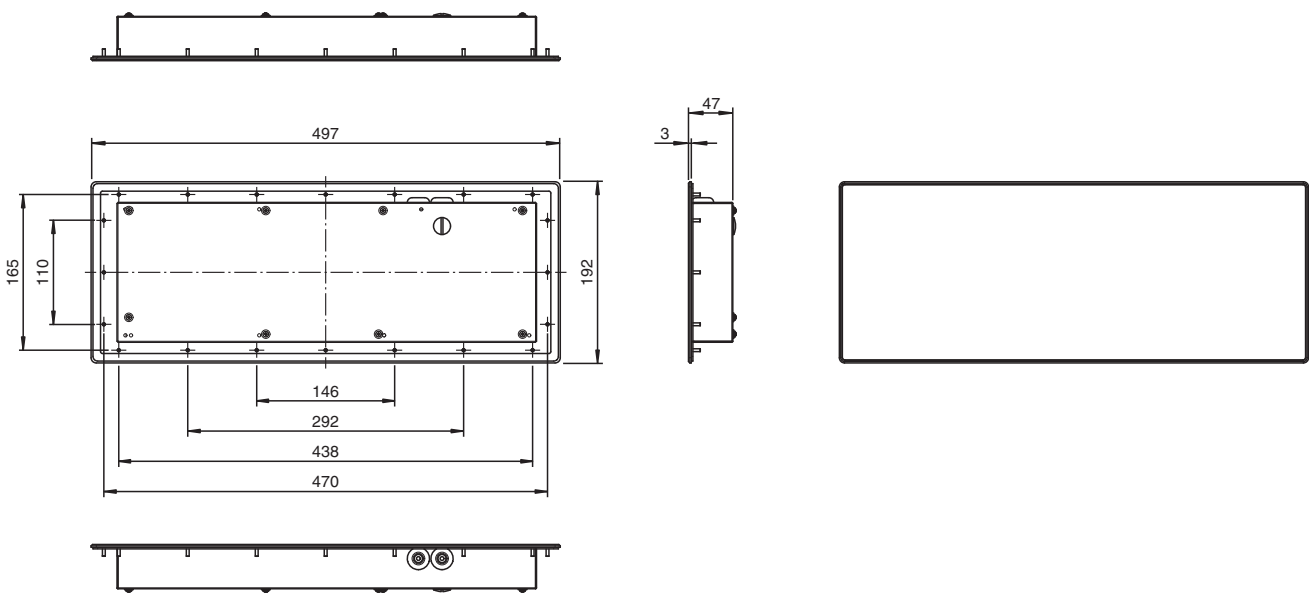


Standard housing with mounting options – sample VisuNet GXP One-Arm Installation



Dimensions

Panel Mounting



Technical Data

General specifications			
Type		Keyboard with joystick	
Suitable components			SK-PC-Z1D1-UU1-10-HS
Supply			
Rated voltage		U _r	Ex i, via data line
Indicators/operating means			
Keyboard			105 short stroke keys Keyboard layout: US international, German, French
Interface			
Interface type			USB
Directive conformity			
Electromagnetic compatibility			
Directive 2014/30/EU			EN 61326-1:2021 (Ind loc) EN 61000-6-4:2007+A1:2011 EN 55011:2016+A11:2020 (Class B)
Explosion protection			
Directive 2014/34/EU			EN IEC 60079-0:2018 EN 60079-11:2012
RoHS			
Directive 2011/65/EU (RoHS)			EN IEC 63000:2018-12
Conformity			
Degree of protection			IP65
Ambient conditions			
Ambient temperature			-20 ... 50 °C (-4 ... 122 °F)
Storage temperature			-20 ... 70 °C (-4 ... 158 °F)
Relative humidity			max. 85 % , non-condensing
Mechanical specifications			
Material			anodized aluminum , stainless steel (F1- Mounting Option), Polyester foil
Mass			1.2 kg (without housing)
Dimensions			502 mm x 222 mm x 66 mm
Cut out dimensions			450 mm x 152 mm

Technical Data

Cable length		5 m / 2 m / 1 m
Data for application in connection with hazardous areas		
EU-type examination certificate		Zone 1/21 BVS 07 ATEX E 163 X
		Zone 2/22 BVS 21 ATEX E 009 X
Marking		Zone 1/21 Ⓔ II 2G Ex ib IIC T4 Gb Ⓔ II 2D Ex ib IIIB T135°C Db Zone 2/22 Ⓔ II 3G Ex ic IIC T4 Gc Ⓔ II 3D Ex ic IIIB T135°C Dc
International approvals		
IECEx approval		
IECEx certificate		Zone 1/21 IECEx BVS 08.0022X
		Zone 2/22 IECEx BVS 08.0022X
IECEx marking		Zone 1/21 Ex ib IIC T4 Gb Ex ib IIIB T135°C Db Zone 2/22 Ex ic IIC T4 Gc Ex ic IIIB T135°C Dc

Type Code

EXTA4-*

EXTA4-	(1)-	(2)-	K(3)	(4)-	U(5)	(6)-	(7)-	(8)
--------	------	------	------	------	------	------	------	-----

Model

EXTA4-	Short travel foil keyboard for use in explosion hazardous environments - standard option
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(1)- Explosion protection

N1-	Industrial, general purpose (non-ex)
J1-	ATEX & IECEx Zone 1/21
L1-	ATEX & IECEx Zone 2/22

(2)- Housings

NN-	No housing, panel mounting
F1-	Standard housing with mounting options
F2-	Pharma housing with mounting options
T1-	Desktop housing

K(3) Mouse Options

K4	Capacitive touchpad
K6	Joystick
K8	Optical trackball

(4)- Keyboard Layouts

US0-	US-International Layout (QWERTY)
DE0-	German Layout (QWERTZ)
FR0-	French Layout (AZERTY)
xxx-	Other languages on request [place holder option for other languages]

U(5) Cable Length

U10	1 m cable length (preferred for GXP and FLX) [only for housing options "NN", "F1" and "F2", not for "T1"]
U20	2 m cable length (preferred option for AG1 housing)
U50	5 m cable length (preferred for Desktop housing option) [only for housing options "NN" and "T1", not for "F1" and "F2"]

(6)- Connectors

C1-	Cable end with crimped ferrules (e.g. to connect to VisuNet GXP or Barrier) - standard option
U1-	USB type A male connector (e.g. to connect to VisuNet FLX) - standard option

(7)- Mounting Options

NP-	Panel mounting [only for housing option "NN"]
-----	---

Type Code

(7)-	Mounting Options
T1-	No mounting option - Desktop housing [only for housing options "T1" AND cable length "U20" or "U50"]
G1-	GXP One-Arm installation to AG-XX00 - standard option [only for housing option "F1" AND cable length "U10" AND connector "C1"]
G2-	GXP Double-Arm installation to AG1 - standard option [only for housing option "F1" AND cable length "U20" AND connector "C1"]
F1-	VisuNet FLX one-arm installation to AG-XX00 [only for housing option "F2" AND cable length "U10" AND connector "U1"]
H1-	Hinged version for VisuNet FLX - standard option [only for housing option "F1" AND cable length "U10" AND connector "U1"]
C1-	Cabinet / horizontal installation on vertical housing (wall mounting) - standard option [only for housing option "F1" AND cable length "U20" AND connector "U1"]

(8)	Options
N0	Standard, no options - standard option [standard option & preferred]
U0	UV-resistant front foil for outdoor use

Example:

EXTA4-	N1-	NN-	K4	US0-	U10	C1-	NP-	N0
--------	-----	-----	----	------	-----	-----	-----	----



Additional Information

Chemical resistance of keyboard foil

The keyboard foil is manufactured from a biaxially aligned polyester-based material and therefore has a greater resistance to solvents. The foil is stronger and more durable than other standard foils used on keyboards and front panels, such as polycarbonate and PVC.

The keyboard foil is resistant against the following substances: (Test methode: DIN42115)	The foil passed the anti microbial effectiveness tested with: (Test method: AATCC Test method 100)
Alcohols	Staphylococcus aureus (MRSA)
Dilute acids	Escherichia coli 0157
Dilute alkalis	Listeria monocytogenes
Esters	Pseudomonas aeruginosa
Hydrocarbons	Salmonella enteritidis
Ketones	Bacillus cereus
Household cleaning agents	Streptococcus faecalis
	Klebsiella pneumoniae
	Aspergillus niger
	Penicillium purpurogenum
	Phoma violacea
	Saccharmyces cerevisiae



Ex i keyboard with optical trackball EXTA4-*1-**-K8* (2024 Generation)

- Degree of protection: IP66
- Stainless steel housing
- National layout variants available for US, GER and FR
- PC-compatible-keyboard with 105 short stroke keys
- Designed for use in Zone 1/21 and Zone 2/22 hazardous areas
- USB interface with USB cable

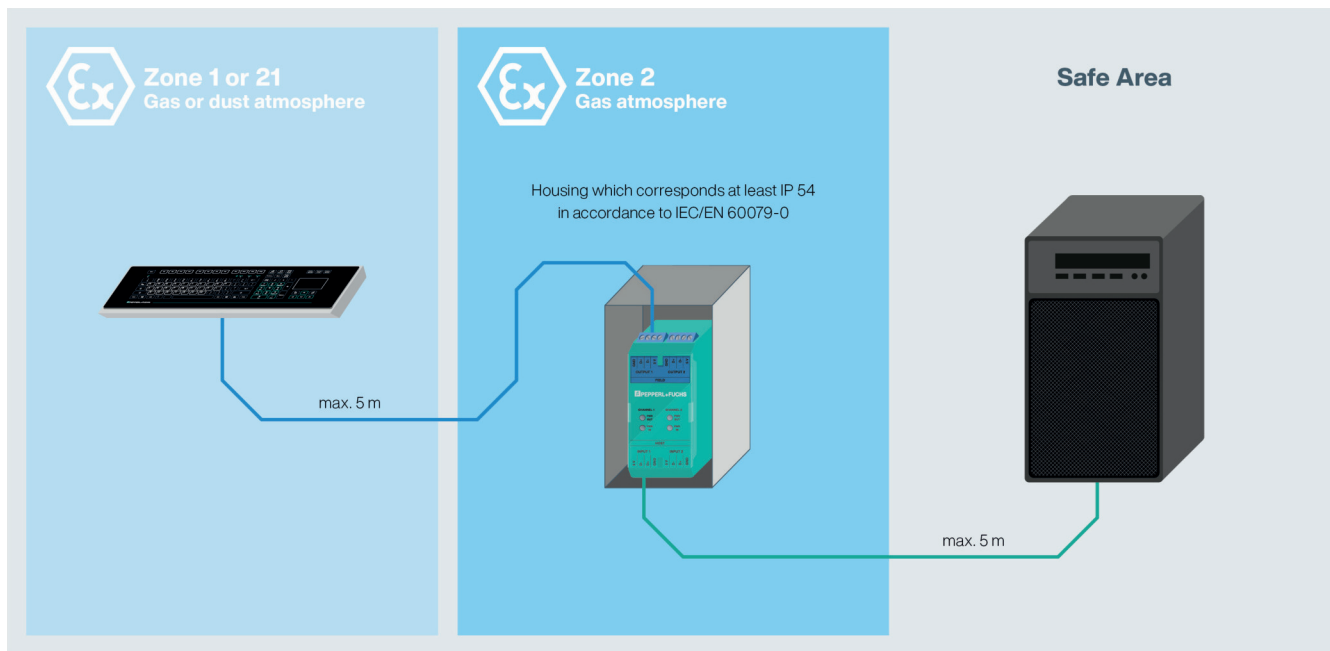
Ex i keyboard with optical trackball



Function

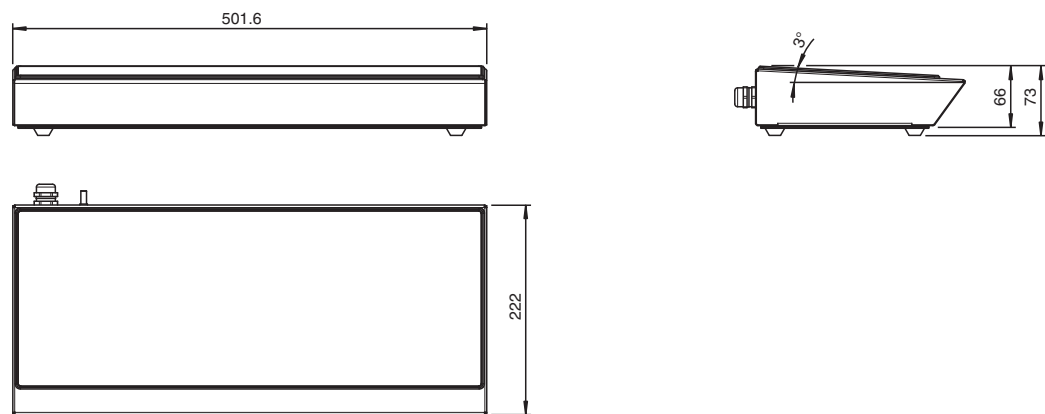
EXTA4-* is an intrinsically safe keyboard with touchpad (EXTA4-*1-**-K4*), joystick (EXTA4-*1-**-K6*) or optical trackball (EXTA4-*1-**-K8*). The interfaces of mouse and keyboard are included in one IS-Circuit. The Circuit is lead trough in one connecting cable (connecting cable is included in delivery). The keyboards are designed for panel mounting or for installation in a housing. The EXTA4-* is designed as accessory for the Pepperl+Fuchs Workstations VisuNet GXP and VisuNet FLX but can be used as stand-alone keyboard in combination with the available barriers as well.

Function Principle

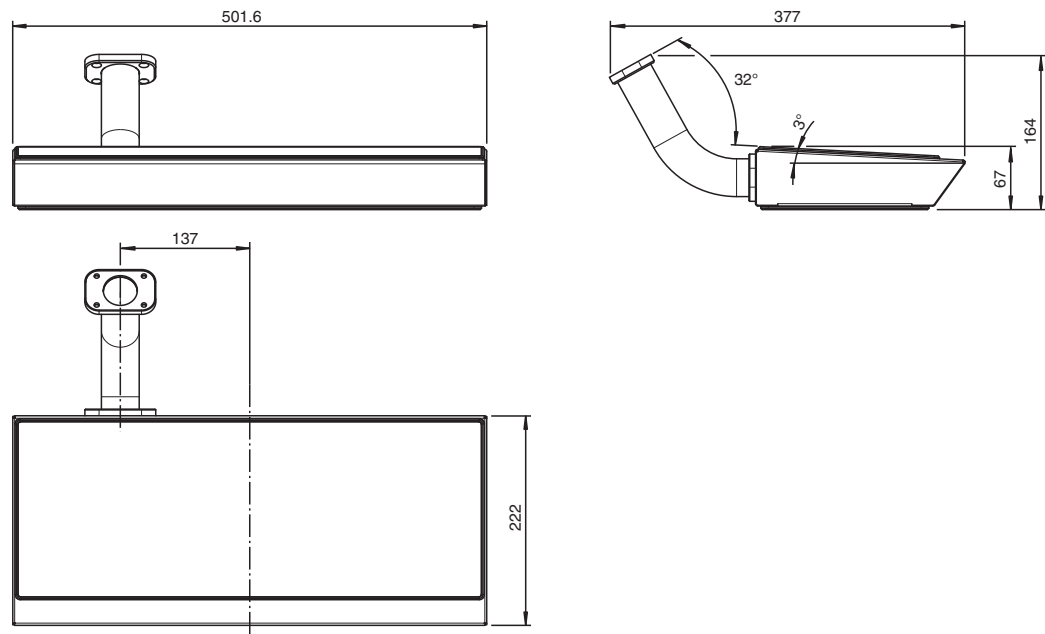


Dimensions

Desktop housing

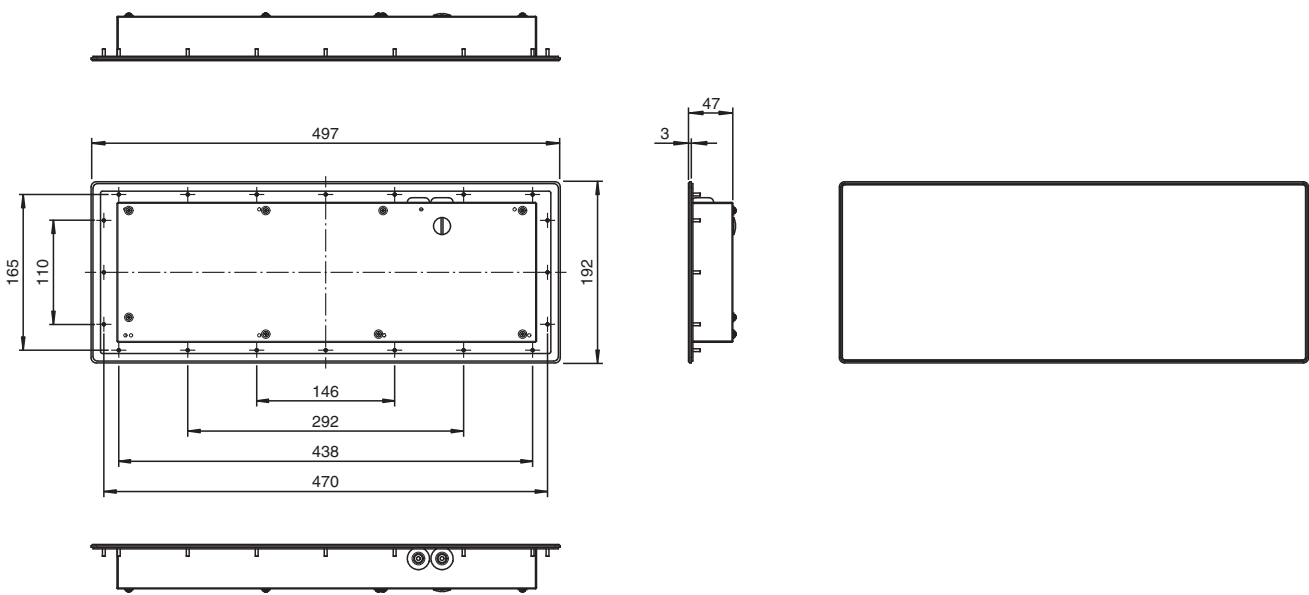


Standard housing with mounting options – sample VisuNet GXP One-Arm Installation



Dimensions

Panel Mounting



Technical Data

General specifications			
Type		Keyboard with optical trackball	
Suitable components			SK-PC-Z1D1-UU1-10-HS
Supply			
Rated voltage		U _r	Ex i, via data line
Indicators/operating means			
Keyboard			105 short stroke keys Keyboard layout: US international, German, French
Trackball			
Diameter			50 mm
Material		PROX resin (metallic grey)	
Interface			
Interface type		USB	
Directive conformity			
Electromagnetic compatibility			
Directive 2014/30/EU			EN 61326-1:2021 (Ind loc) EN 61000-6-4:2007+A1:2011 EN 55011:2016+A11:2020 (Class B)
Explosion protection			
Directive 2014/34/EU			EN IEC 60079-0:2018 EN 60079-11:2012
RoHS			
Directive 2011/65/EU (RoHS)			EN IEC 63000:2018-12
Conformity			
Degree of protection			IP66 in full operation (dynamic)
Ambient conditions			
Ambient temperature			0 ... 50 °C (32 ... 122 °F)
Storage temperature			-20 ... 70 °C (-4 ... 158 °F)
Relative humidity			max. 85 % , non-condensing
Mechanical specifications			
Material			anodized aluminum , stainless steel (F1- Mounting Option), Polyester foil

Technical Data

Mass	1.2 kg (without housing)
Dimensions	502 mm x 222 mm x 66 mm
Cut out dimensions	450 mm x 152 mm
Cable length	5 m / 2 m / 1 m
Data for application in connection with hazardous areas	
EU-type examination certificate	Zone 1/21 BVS 07 ATEX E 163 X
	Zone 2/22 BVS 21 ATEX E 009 X
Marking	Zone 1/21 Ⓢ II 2G Ex ib IIC T4 Gb Ⓢ II 2D Ex ib IIIB T135°C Db
	Zone 2/22 Ⓢ II 3G Ex ic IIC T4 Gc Ⓢ II 3D Ex ic IIIB T135°C Dc
International approvals	
IECEX approval	
IECEX certificate	Zone 1/21 IECEX BVS 08.0022X
	Zone 2/22 IECEX BVS 08.0022X
IECEX marking	Zone 1/21 Ex ib IIC T4 Gb Ex ib IIIB T135°C Db
	Zone 2/22 Ex ic IIC T4 Gc Ex ic IIIB T135°C Dc

Type Code

EXTA4-*

EXTA4-	(1)-	(2)-	K(3)	(4)-	U(5)	(6)-	(7)-	(8)
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Model

EXTA4-	Short travel foil keyboard for use in explosion hazardous environments - standard option
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(1)- Explosion protection

N1-	Industrial, general purpose (non-ex)
J1-	ATEX & IECEX Zone 1/21
L1-	ATEX & IECEX Zone 2/22

(2)- Housings

NN-	No housing, panel mounting
F1-	Standard housing with mounting options
F2-	Pharma housing with mounting options
T1-	Desktop housing

K(3) Mouse Options

K4	Capacitive touchpad
K6	Joystick
K8	Optical trackball

(4)- Keyboard Layouts

US0-	US-International Layout (QWERTY)
DE0-	German Layout (QWERTZ)
FR0-	French Layout (AZERTY)
xxx-	Other languages on request [place holder option for other languages]

U(5) Cable Length

U10	1 m cable length (preferred for GXP and FLX) [only for housing options "NN", "F1" and "F2", not for "T1"]
U20	2 m cable length (preferred option for AG1 housing)
U50	5 m cable length (preferred for Desktop housing option) [only for housing options "NN" and "T1", not for "F1" and "F2"]

(6)- Connectors

C1-	Cable end with crimped ferrules (e.g. to connect to VisuNet GXP or Barrier) - standard option
-----	---

Type Code

(6)-	Connectors
U1-	USB type A male connector (e.g. to connect to VisuNet FLX) - standard option
(7)-	Mounting Options
NP-	Panel mounting [only for housing option "NN"]
T1-	No mounting option - Desktop housing [only for housing options "T1" AND cable length "U20" or "U50"]
G1-	GXP One-Arm installation to AG-XX00 - standard option [only for housing option "F1" AND cable length "U10" AND connector "C1"]
G2-	GXP Double-Arm installation to AG1 - standard option [only for housing option "F1" AND cable length "U20" AND connector "C1"]
F1-	VisuNet FLX one-arm installation to AG-XX00 [only for housing option "F2" AND cable length "U10" AND connector "U1"]
H1-	Hinged version for VisuNet FLX - standard option [only for housing option "F1" AND cable length "U10" AND connector "U1"]
C1-	Cabinet / horizontal installation on vertical housing (wall mounting) - standard option [only for housing option "F1" AND cable length "U20" AND connector "U1"]
(8)	Options
N0	Standard, no options - standard option [standard option & preferred]
U0	UV-resistant front foil for outdoor use

Example:

EXTA4-	N1-	NN-	K4	US0-	U10	C1-	NP-	N0
--------	-----	-----	----	------	-----	-----	-----	----

Additional Information

Chemical resistance of keyboard foil

The keyboard foil is manufactured from a biaxially aligned polyester-based material and therefore has a greater resistance to solvents. The foil is stronger and more durable than other standard foils used on keyboards and front panels, such as polycarbonate and PVC.

The keyboard foil is resistant against the following substances: (Test methode: DIN42115)	The foil passed the anti microbial effectiveness tested with: (Test method: AATCC Test method 100)
Alcohols	Staphylococcus aureus (MRSA)
Dilute acids	Escherichia coli 0157
Dilute alkalis	Listeria monocytogenes
Esters	Pseudomonas aeruginosa
Hydrocarbons	Salmonella enteritidis
Ketones	Bacillus cereus
Household cleaning agents	Streptococcus faecalis
	Klebsiella pneumoniae
	Aspergillus niger
	Penicillium purpurogenum
	Phoma violacea
	Saccharmyces cerevisiae

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